

# AGRICULTURAL OUTLOOK



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**Cover:** Unloading peanuts for cleaning and grading, Oklahoma. Grant Heilman/Grant Heilman Photography.

## Peanut farm prospects . . . Food aid & food security . . . Safety nets & trade liberalization . . . Middle East/North Africa trade

### Safety Nets: An Issue in Global Agricultural Trade Liberalization

*Global trade liberalization* is expected to benefit many countries, including those developing countries that are net agricultural exporters and are able to respond to expanded market opportunities. Other low-income countries, however, could experience greater food insecurity as trade liberalization leads to higher and perhaps more variable prices for some food commodities. The international safety nets that presently exist, including food aid, are inadequate to stabilize food supplies for vulnerable countries. New safety net proposals are being assessed that could help stabilize grain import prices or manage import costs. Recent estimates of selected proposals suggest that the costs could be much less than those of current programs. Improving international safety net programs may not only temper food security concerns, but also generate support among low-income countries for further trade liberalization.

### Food Aid: How Effective in Addressing Food Security?

*How effective have* food aid programs been in addressing the needs of recipient countries? What does this imply for future effectiveness? Analysts at USDA's Economic Research Service (ERS) evaluated food security situations in 67 developing countries by first projecting the gaps between estimated food consumption and several consumption targets through the next decade. The ERS food security assessment took into account each country's physical access to food (ability to produce and import) and economic access (ability to purchase). ERS then calculated the food gaps that would remain after food aid allocations, using the most recently available food aid data for the projections. Among the findings is that food aid is most effective in reducing the "distribution gap," which captures the impact of unequal purchasing power in the countries studied, and estimates the number of people consuming below consumption targets.



### Peanut Consumption Rebounding Amidst Market Uncertainties

*In the U.S., most peanuts* are consumed directly as food (peanuts and peanut products) rather than as vegetable oil or in animal feed. Food use has rebounded from a decline in the early 1990s, and is forecast at record levels in 2001/02. Even so, new challenges since the mid-1990s have put downward pressure on average farm prices and brought cash receipts in 1999 and 2000 to the lowest levels in almost two decades. These challenges include increased access for peanut imports under trade agreements, strong competition in export markets (notably from China), and changes in domestic support policy under the 1996 Farm Act. The prospect of major changes to the peanut program under new farm bill proposals is also a source of uncertainty for peanut producers.

### Middle East/North Africa Region: A Major Market for U.S. Feeds

*The 20 countries* of the Middle East and North Africa (MENA) region provide a substantial market for U.S. coarse grains, oilseeds, and meals. Prospects are for this market to continue growing. During the

1990s, the MENA region became increasingly dependent upon feed imports to support its expanding livestock and poultry production. In 2000, MENA was the largest foreign market for U.S. barley and soybean meal and the second-largest market for U.S. corn. Feed imports are expected to expand further in the future for most MENA countries because of population and income growth coupled with restrictions on imports of red meat and poultry. The U.S. will continue to be a major supplier, but will face price competition from other countries, notably Argentina and Brazil.

### Farm Income, Finance, & Credit Outlook for 2002

*The overall financial* state of the U.S. agricultural sector is sound, as evidenced by continuing increases in asset values and equity levels. Net cash income before government payments is expected to increase for the third straight year and exceed \$40 billion for the first time since 1998. The level of government payments will have a large impact on the economic outlook for 2002. The article includes an analysis of payment levels above those implied by current law, estimating their potential impact on 2002 farm income.

### Fresh Snap Beans: No Strings Attached

*On any given day*, about 2 percent of Americans consume fresh snap beans, popularly known as green beans or string beans. Per capita use of fresh-market snap beans has been on the rise over the past decade, reaching 2.1 pounds in 2000. Fresh-market production, which has risen during the 1990s, accounted for about 25 percent of the 2.1 billion pounds of snap beans produced in the U.S. during 1998-2000. Spurred by strong demand, particularly from the fresh market, total snap bean production in 1998-2000 was higher than in 1988-1990. Consumer interest in nutrition and healthy lifestyles should support further growth in fresh snap bean consumption.

## Commodity Spotlight



USDA photo: Ken Hammond

## Peanut Consumption Rebounding Amidst Market Uncertainties

**P**eanuts and peanut products (peanut butter, ball park nuts, peanut candies, and salted peanuts) are a familiar and longstanding staple in the American diet. Peanuts are also valued when crushed—as high-protein animal feed and as vegetable oil preferred for its long shelf life and cooking qualities. In the U.S., though, most peanuts are consumed directly (as peanuts or peanut products), so the edible non-oil food-use category of demand for peanuts is vital to income prospects for peanut farmers. This is especially the case since the U.S. peanut program provides a relatively high price support level for U.S. peanuts allowed to be marketed for domestic food use ("quota" peanuts). This quantity depends on anticipated demand for the following year, and is adjusted annually by USDA. All peanuts produced beyond this level ("additional") must be channeled into lower valued export or crush markets, and are only eligible for a much lower support rate.

Food use has rebounded from a decline during the early 1990s, and is forecast at record levels in 2001/02. Nevertheless, U.S. peanut farmers have faced new challenges since the mid-1990s, putting downward pressure on average farm prices and

bringing cash receipts in 1999 and 2000 to the lowest levels in almost two decades. These challenges include changes in domestic support policy under the 1996 Farm Act, increased access for peanut imports under trade agreements, and strong competition in export markets. The prospect of major changes to the peanut program under new farm bill proposals is also a source of uncertainty for peanut producers.

In the U.S., the dominant source of demand for peanuts—about 70 percent of total domestic consumption—is direct consumption (food use). Food use of peanuts is comprised of two main categories. *Shelled* peanuts include those used for peanut butter (about 45 percent of peanut food use), snack peanuts (23 percent), and peanut candy (21 percent). Roasted *in-shell* peanuts account for about 9 percent of U.S. peanut food use. The proportion of peanuts crushed for animal feed and vegetable oil is small, especially when compared with other oilseeds (e.g., soybeans). Lower quality peanuts ("pickouts") used for crushing make up only 18 percent of domestic consumption. Seed and residual uses account for the remaining 12 percent.

In 1989, domestic food use of peanuts peaked at 2.32 billion pounds (in-shell basis), or about 9.4 pounds per person. But, in the early and mid-1990s, prospects did not look good. A steady decline in demand reflected demographic trends (such as the smaller number of children among the baby-boomer generation), health and dietary concerns about fat content in peanuts, and competition from lower priced snack products.

From its peak in 1989, domestic food use declined 15 percent by 1995, to just over 2 billion pounds (in-shell basis). Press reports of severe allergic reactions to peanuts among a small number of consumers may also have reduced household and institutional (e.g., by airlines and schools) demand during this time.

U.S. peanut consumption has turned around since 1995 as food use rose almost without interruption to a projected record of 2.34 billion pounds in 2001/02. The cause of the revival is not entirely clear. Some observers have attributed it to reduced concern about fat in foods, a growing awareness of studies linking peanut consumption to improved health, the introduction of new products (e.g., flavored in-shell peanuts), and increased retail promotion by peanut product manufacturers and industry associations. Promotional efforts have highlighted the fact that peanuts, while relatively high in fat, are also a good source of protein, contain no cholesterol, and are low in saturated fats—the type most associated with coronary heart disease.

Despite higher peanut consumption, farm-level income from peanuts in 2000/01 was below \$1 billion for the second straight year—at \$896 million. Gross farm income from peanut production in 1991/92 (a record crop year) was nearly \$1.4 billion, and had not been below \$1 billion since 1983. Although producers enjoyed record yields in 2001/02—at over 3,000 pounds per acre—and the highest peanut production since 1994/95, low monthly average farm prices in the key first quarter of the current 2001/02 marketing year (August-July) portends only modest revenue gains for peanut farmers. Weak average prices reflect the large crop and mounting ending stocks, which are projected at a record high.



## Commodity Spotlight

## Impact of Farm Policy & Trade Agreements

The general decline in income is rooted in domestic support program changes and trade policies enacted during the mid-1990s that lowered support to domestic peanut producers and opened the door to increased import competition for the domestic edible peanut market. The decline in revenues is also tied to fading demand for exports and crushed peanuts compared with levels of the early 1990s. In particular, the export market—an important outlet for U.S. additional—has become increasingly competitive with a surge in production and exports from the world's leading peanut producer, China. The crushed value of peanuts has also weakened in the face of depressed prices of competing substitutes, such as soybean meal and oil.

The 1996 Farm Act did not fundamentally alter the U.S. peanut program, but several modifications effectively lowered income potential from peanut production. Among the more significant were those affecting the quota support price and the quota itself—the amount producers can sell for domestic food use.

The quota support price was lowered from \$678 per short ton during 1995 to a fixed \$610 per short ton during the 1996-2002 crop years. The quota poundage is now set annually at the projected level of U.S. food and related use demand, and there is no longer a required minimum (as in previous legislation).

For the 1991-95 crops, USDA was required to set the quota amount at a minimum of 1.35 million short tons, regardless of anticipated domestic food demand. The quota for the 1998 through 2002 crop years has been set at 1.18 million short tons (not including a separate quota for seed peanuts). In addition to lowering the support price, the 1996 Farm Act eliminated an automatic escalator, which allowed the support price to increase annually by up to 5 percent, based on the previous year's production costs. These changes were intended to make the peanut program operate at no net cost to the government. If the quota amount and support price had been left unchanged at the higher levels, it is possible that demand by

## Congressional Proposals Would Transform Peanut Program

Current proposals for the next farm bill contain substantial changes to the peanut program. Passed in October 2001, the House Farm Security Act of 2001 (H.R. 2646) would eliminate the quota system. Peanuts would be treated similarly to "program" crops such as grains and cotton—with a system of direct support payments contingent on historical acreage, but not current production, and with marketing loan provisions. Farmers would no longer have to own or rent quota to produce for domestic food use. The proposal also includes a buyout for quota holders. Although it is uncertain what form the final farm bill will take, similar reforms of the peanut program are incorporated in the Senate version of the farm bill (S.1731), which was passed on February 13, 2002.

The proposals contain four main provisions. The fixed decoupled payment and countercyclical payments would be options only for those with a history of peanut production during 1998-2001:

- **Marketing assistance loan.** As with other crops eligible for marketing loans and loan deficiency payments, peanut producers, with or without a history of peanut production, would be eligible for a marketing assistance loan. The House proposed a loan rate of up to \$350 per short ton; the Senate proposed up to \$400. Producers could pledge their stored peanuts as collateral for up to 9 months and then repay the loan at a rate that is the lesser of: 1) the loan rate plus interest, or 2) a USDA-determined repayment rate designed to minimize loan forfeiture, government-owned stocks, and storage costs, as well as to allow free and competitive marketing of U.S. peanuts in domestic and international markets.
- **"Fixed, decoupled" payment.** Similar to the production flexibility contract payments made available to grain and cotton producers in the 1996 Farm Act, peanut producers would receive \$36 per ton of eligible production during the base (1998-2001) period. Eligible production would equal the product of: base-period yields (with provisions for unusual crop losses) and 85 percent of base-period acres planted to peanuts. These payments are considered fixed and decoupled because they are made regardless of current prices or so long as the area remains in an approved agricultural use.
- **"Countercyclical" payment.** Producers with base acreage would receive financial assistance when market prices are below an established target price of \$480 per ton. The payment would be based on the difference between the target price and the higher of: 1) the 12-month national average market price for peanuts plus the \$36-per-ton fixed decoupled payment, or 2) the marketing assistance loan rate plus the \$36-per-ton fixed decoupled payment. Payments would be made on 85 percent of base (1998-2001) peanut production so long as the area remains in an approved agricultural use.
- **Quota buyout (compensation for loss of quota asset value).** Quota owners would receive compensation for lost asset value of their quota. Payment would be made in five annual installments of \$200 per ton during fiscal years 2002 through 2006. The payment would be based on the quota owners' 2001 quota.

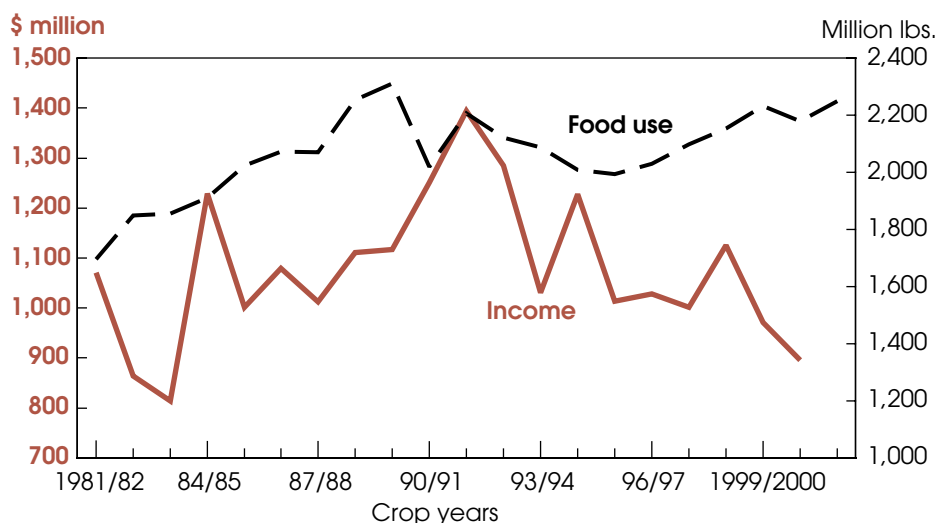
peanut processors and shellers would not have been sufficient to clear the market. In that case, the unsold quota peanuts would be defaulted to USDA for disposal in the lower priced crush market. Peanut quota holders are responsible for reimbursing these losses to USDA.

In addition to pressures stemming from changes to the domestic support program,

trade agreements began to expose U.S. producers to increased import competition in the mid-1990s. With only 5 percent of global peanut production exported, peanuts are far less widely traded than many other commodities, but for the U.S. peanut market, trade is an important component of both supply and demand. The U.S. is both a leading exporter (ranking second behind China) and a leading importer (ranking

## Commodity Spotlight

### Peanut Farm Income Down Sharply from Mid-1990s, Despite Higher Trending Food Use



2001/02 food use forecast.

Economic Research Service, USDA

### Peanut Production, Domestic Food Use, and Exports To Rise in 2001/02

Year beginning August 1	Production	Domestic food use	Exports	Imports
<i>Million lbs.</i>				
1980/81	2,303	1,465	503	401
1981/82	3,982	1,696	576	1
1982/83	3,440	1,849	681	2
1983/84	3,296	1,856	744	2
1984/85	4,406	1,911	860	2
1985/86	4,123	2,023	1,043	2
1986/87	3,697	2,073	663	2
1987/88	3,616	2,071	618	2
1988/89	3,981	2,254	688	3
1989/90	3,990	2,312	989	4
1990/91	3,604	2,020	652	27
1991/92	4,927	2,207	1,002	5
1992/93	4,284	2,122	951	2
1993/94	3,392	2,088	533	2
1994/95	4,247	2,009	878	74
1995/96	3,461	1,993	826	153
1996/97	3,661	2,029	668	127
1997/98	3,539	2,099	682	141
1998/99	3,963	2,153	562	155
1999/00	3,829	2,233	743	180
2000/01	3,266	2,179	527	214
2001/02	4,239	2,240	725	178

2001/02 forecast.

Sources: National Agricultural Statistics Service, USDA; U.S. Department of Commerce.

Economic Research Service, USDA

fifth behind the European Union, Indonesia, Canada, and Japan).

Prior to the 1994 Uruguay Round Agreement on Agriculture (URAA) and the North American Free Trade Agreement (NAFTA), which became effective the

same year, U.S. peanut imports were limited to a specific and very low absolute level by Section 22 of the Agricultural Adjustment Act of 1933. The permitted quantity of 1.7 million pounds (shelled basis) represented barely one-tenth of 1 percent of domestic food consumption in 1993. This limit was designed to prevent lower priced

peanut imports from undermining the U.S. domestic support price program.

Without limitations on imports, the price support program for edible peanuts would not be sustainable at current quota loan rates and world peanut prices. Peanut processors and shellers would seek to avoid the high prices for domestic peanuts (usually at or above the \$610 per short ton quota rate) caused by production limitations, and instead import peanuts at a price (assuming equal quality) below that charged for domestic peanuts. If unrestricted imports were allowed, domestic quota peanuts could go unsold and either the quota would have to be drastically reduced or the quota support price brought closer to world prices.

However, under the URAA and NAFTA, the U.S. has opened its market to limited, but gradually increasing, quantities of peanut (and peanut butter) imports through a tariff-rate quota (TRQ) system. Under the URAA, the U.S. replaced the import quota with a TRQ, permitting a set amount of peanuts into the U.S. at a low in-quota tariff rate, but subjecting imports above that level to a much higher over-quota tariff rate. Most of the quota (78 percent) was reserved for imports from Argentina. The TRQ has specific tariffs for in-quota imports and *ad valorem* tariffs for over-quota imports. The in-quota tariff rate ranges from 6.6-9.35 cents per kilogram; the over-quota tariff rate currently ranges from 131.8 to 163.8 percent.

The quota amount in 2000 was set at 56,821 metric tons (shelled basis), representing about 7.5 percent of total U.S. peanut food use that year. The quota for all countries except Mexico is scheduled to remain fixed after 2000, but Mexico's quota is scheduled to continue increasing through 2007, to 4,815 metric tons as part of the NAFTA agreement. This represents a relatively small share of U.S. consumption. After 2007, imports from Mexico will be completely unrestricted, with no quota or tariff.

In the URAA, the U.S. also established a TRQ for peanut butter, with a duty-free quota level of 20,000 metric tons by 2000, and an over-quota tariff rate of 131.8 percent. The peanut butter TRQ is allocated mainly to Canada (14,500 metric tons) and

## Commodity Spotlight

Argentina (3,650 metric tons). Under NAFTA rules of origin, Canadian exports of peanut butter and paste made with peanuts from another country are not considered of Canadian origin (and are subject to the TRQ) since Canada grows no peanuts. However, imports of Mexican peanut butter and paste face no restrictions so long as they are made with peanuts of Mexican origin. Mexican-produced peanut butter/paste enjoys a cost advantage over domestic production made with peanuts purchased at the high support price.

From virtually no exports to the U.S. prior to 1998, peanut butter and paste exports from Mexico were closing in on 5,000 metric tons during calendar year 2001. Mexico is a small but growing peanut producer, with annual production of 130,000-160,000 tons, and appears to have ample production to fuel continued growth of both peanut and peanut butter/paste exports to the U.S. But it is also likely that, in the near term, these exports will continue to represent only a small fraction of total U.S. peanut consumption and that Mexico will remain an important destination for U.S. peanut exports (averaging 25,000-40,000 metric tons annually).

In the wake of trade agreements, the quantity of peanut and peanut butter/paste allowed into the U.S. at the lower in-quota tariff rates currently represents approximately 10 percent of the U.S. domestic peanut market in 2000/01, up from 0.1 percent prior to 1995. Some observers have also pointed out that a number of products containing peanuts, including some peanut candies, cookies, and confectionery items, are not subject to TRQs and face lower tariffs than the over-quota rates charged on peanuts and peanut butter/paste.

### ***U.S. Exports Trend Down As Chinese Exports Surge***

Exports have been a key source of demand for U.S. peanut producers for decades. Since 1980, the percentage of U.S. production exported has ranged from 14-25 percent. Nearly all U.S. peanut exports are for direct human consumption. High-quality product and a reputation as reliable suppliers have enabled U.S. sellers to command a price premium in international markets.

### **Peanut Profile in a Nutshell**

Peanuts are believed to have originated in South America, probably in Brazil or Peru. Peanuts were introduced to Asia and Africa by Spanish explorers and to North America in the 1700s. Four main varieties of peanuts are produced in the U.S.: Runners, Virginia, Spanish, and Valencia.

The most common variety, Runners, accounts for about three-quarters of U.S. peanut production and is used mainly to make peanut butter (52 percent of Runners in 2000/01) but also in peanut candy (26 percent) and as snack peanuts (20 percent). The large, high-quality Virginia peanuts account for about 15 percent of domestic production and are more favored as snack peanuts (e.g., roasted in-shell peanuts and salted or honey-roasted peanuts). Spanish peanuts, with smaller kernels and higher oil content, are used mainly in peanut candies. The least common, Valencias, also have small kernels and are known for their sweetness. They are produced almost exclusively in New Mexico, and are usually roasted and sold in the shell.

At the national level, peanuts are a relatively minor crop, with farm-level value of production less than 5 percent of the value of corn production in 2000/01. But peanut production is concentrated in a small number of states and is a key contributor to local economies. Virtually all peanut production takes place in just nine states in three regions: the Southeast (Georgia, Alabama, Florida, and South Carolina), with 55 percent of national production; the Southwest (Texas, Oklahoma, and New Mexico), with 30 percent; and the Virginia-North Carolina region, with 15 percent.

Although global peanut trade increased slightly (4 percent) between 1990-95 and 1996-2000, U.S. exports during the same time period declined. U.S. peanut exports averaged 807 million pounds during 1990-95, but dropped by nearly 22 percent to 632 million pounds during 1996-2000. U.S. peanut exports in 2000, at 520 million pounds (valued at about \$135 million), were the lowest since 1980, but shipments are projected to rebound to 725 million pounds in 2001/02.

China emerged as the major competitor to the U.S. in 1980, with sales to Japan and other Asian countries, and small shipments to Western Europe. High peanut prices brought on by the 1980 U.S. drought, China's policy incentives for expanding oilseed production, and the opportunity to increase foreign exchange earnings were among the catalysts for increased exports by China.

From 1980 to 1996, the U.S. and China regularly exchanged position as the world's leading peanut exporter. In 1997 Argentina led in global exports, but since then China has led the world by a large margin and appears poised to remain the leading exporter for the foreseeable future due in part to its low production costs and the proximity of main production regions to ports.

In the past 5 years, peanut production in China—concentrated mainly in the eastern coastal province of Shandong—has soared, rising from an average of 7.8 million metric tons during 1990-95 to a projected 14.5 million metric tons in 2001 (more than 7 times U.S. production). While China's domestic consumption is rising nearly as much, the surplus has allowed exports to expand. However, the potential for increased exports from China may be restrained both by limits on area suitable for peanut planting, and by reports of problems with aflatoxin (a disease that makes the nuts inedible) in peanut exports from Shandong.

Like producers of other agricultural commodities in the past several years, U.S. peanut growers have confronted pressures from market forces and the impacts of policy developments. While demand prospects are brighter than in the mid-1990s, the outlook for peanut farmer incomes is clouded by the potential for higher imports, and increased competition in export markets. The prospect of further legislative changes to the peanut program is also a source of uncertainty for peanut producers. **AO**

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## Commodity Spotlight



### Fresh Snap Beans: No Strings Attached

Fannie Farmer published a recipe for string bean soup in *The Boston Cooking School Cook Book* in 1896. But snap beans, a native of the Americas, had already been on America's dinner plates for centuries. Today, on any given day, about 2 percent of Americans consume fresh snap beans, popularly known as green beans or string beans. Per capita use of fresh-market snap beans has been on the rise over the past decade, reaching 2.1 pounds in 2000.

The term "snap beans" refers to the crackling sound made when fresh beans are broken in two. They were once widely known as string beans because of their stringy pods. But over the past century the tough pod strings have been bred out of most of today's popular varieties. Snap beans may be various shades of green, yellow (called wax beans), or purple, and the bean pod shapes vary from round to flat. Snap beans are available year round, with the peak season from May through October.

In the U.S., snap beans are produced largely for three distinct markets—fresh, canning, and freezing. These markets operate fairly independently, with separate supply, demand, and price characteristics. Fresh-market production during 1998–

2000 accounted for about 25 percent of the 2.1 billion pounds produced in the U.S.—the same share as for frozen snap beans. Canning is the most intensive use, with 50 percent of all snap beans destined for canneries. A small amount of snap beans is used for dehydrated products. Because of higher prices received for fresh-market beans, that segment commands two-thirds, or \$250 million, of all farm cash receipts for snap beans.

Commercially, the two most important types of snap beans are bush beans and pole beans, with bush types accounting for the majority of commercial sales. While both types of plant produce beans of similar taste and texture, their differences are more notable in the field. Labor-intensive

Snap beans are the most widely consumed species (*vulgaris*) of the genus *Phaseolus*. Thought to have originated in Central America, they include dozens of varieties. Snap beans are harvested and eaten at the immature pod stage—they are most tender and succulent before the seeds cause the pod walls to expand. In contrast, their closely related cousins, dry beans, are harvested after the seeds are fully developed and the pods are dry.

pole types, which have a longer bearing season, are popular in some regions and with home gardeners, but do not lend themselves to mechanical harvesting because plants must be supported by trellises. Pole beans (and bush beans in some growing areas) are generally harvested by hand several times a season, at intervals of 3 to 5 days. Many commercial fresh-market bush varieties have been specially bred to facilitate mechanical harvesting, which is accomplished in one pass over the field (the plants are destroyed in the process). Virtually all beans for processing are machine-harvested.

Many fresh-market snap beans have a higher pod fiber content than processing types, which helps withstand the rigors of mechanical harvest, packing, and transportation. While snap beans destined for canning and freezing are usually processed hours after harvest, fresh-market beans must remain merchantable for 7 to 10 days. At harvest, most fresh-market snap beans are trucked to packinghouses where they are washed, trimmed, graded, packed, and cooled for transport to market. Field-packing of snap beans, although less common, is done in some areas to reduce handling losses.

The volume of U.S. canning production has changed little over the past three decades, but fresh and frozen output has increased. Production of snap beans for frozen use has been on a slow upward trend during this period, while fresh market output began to rise in the early 1990s after remaining fairly stable for the previous two decades. Spurred by strong demand, fresh-market snap bean production in 1998–2000 was 90 percent higher than 1988–1990.

#### *Florida Tops The Fresh Market*

Some 9,118 farms in all 50 states (1997 Census of Agriculture) produce fresh and processing snap beans—down 16 percent from 1992. Like production of many agricultural commodities, snap bean operations are becoming more concentrated. According to the 1997 Census, just 8 percent of farms producing snap beans accounted for three-fourths of national snap bean harvested area. While area harvested and number of farms with less than

## Commodity Spotlight

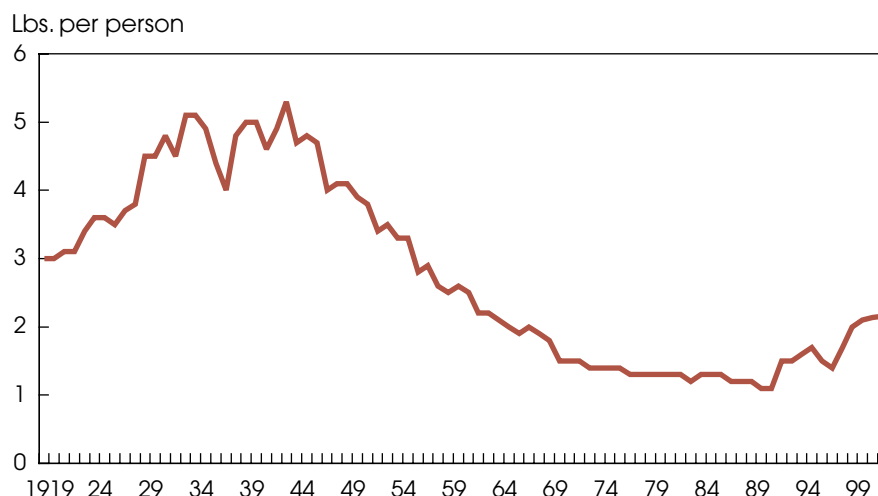
250 acres of snap beans have declined since 1992, area and numbers of farms with 250 acres or more have increased.

In the U.S., there is minimal overlap between the fresh and processing markets, largely because of differences in varieties and the geographic location of processing plants. Florida is the leading fresh-market source, growing nearly half of the fresh crop. Wisconsin tops all processing states, with 31 percent of production, followed by Oregon with 17 percent. Most canned and frozen snap beans are produced under processor contracts requiring specific product attributes.

According to the 1997 Census of Agriculture, 283 farms in Florida reported growing snap beans, with 24 percent harvesting 100 or more acres. Most of Florida's snap bean crop is destined for the fresh market, where the Sunshine State accounts for 48 percent of U.S. output. Mirroring national trends, Florida's production jumped 124 percent between 1988-90 and 1998-2000, after changing little during the 1970s and 80s. Its top three counties (Dade, Palm Beach, and Alachua) account for three-fourths of the crop, with Dade County alone producing half the state's \$135 million in fresh snap beans. Florida has several regional in-state shipping seasons; commercial snap bean shipments generally begin in mid-October and continue through June. Major markets include cities along the east coast and in the Midwest. Florida is the primary domestic supplier from November to April, with volume supplemented by Mexican imports.

Georgia follows Florida in fresh-market snap bean production, accounting for 13 percent of the nation's output during 1998-2000. In 1997, 263 farms harvested snap beans in Georgia, 29 percent fewer than in 1992. However, snap bean acreage jumped 38 percent during this time, with most of the gain in Sumter County. Snap bean area in this southwestern county grew by a factor of 5 from 1992 to 1997; half of Georgia's snap bean crop is now grown there. Georgia ships fresh snap beans during the spring and fall and is the primary domestic supplier in May and June and again in October.

### During the 1990s, Per Capita Use of Fresh Snap Beans Grew Snappier



Economic Research Service, USDA

With 9 percent of U.S. production, California is the third leading source of fresh-market snap beans. Acreage is spread among several counties, but San Luis Obispo (15 percent of state area) and Orange (13 percent) are the only two with over 1,000 acres. Although California's production and acreage declined from 1992 to 1997, the number of farms harvesting snap beans jumped 30 percent to 478 farms in 1997 as more small farms diversified their product lines. Production has increased by one-fourth since reaching a low in 1998. California ships snap beans from March until early December with peak volume from May to August.

New York is the fourth leading producer of fresh snap beans, growing 7 percent of national output. The fresh market accounts for about 20 percent of the state's snap bean crop, with the bulk of the crop earmarked for processing. Genesee County (26 percent of state acreage) in the western part of the state is the leading source of snap beans in New York, followed by Orleans (19 percent), Ontario (11 percent), and Oneida (11 percent) counties. Fresh-market production increased 64 percent between 1988-90 and 1998-2000, while processing output rose 24 percent over the same period. New York ships fresh-market snap beans during the summer, and supplies are strongest during August and September. All processing and most fresh-market

snap bean acreage in New York is mechanically harvested.

North Carolina supplies nearly 7 percent of U.S. fresh-market snap beans and harvested a record-large crop in 2000. Hyde County on the central coast and Henderson County in the western mountain area produce two-thirds of the state's fresh snap bean crop, with acreage for both more than doubling since 1992. North Carolina ships snap beans from mid-May to early November, with volume strongest from June to August.

### *The Seasonal Role In Prices & Trade*

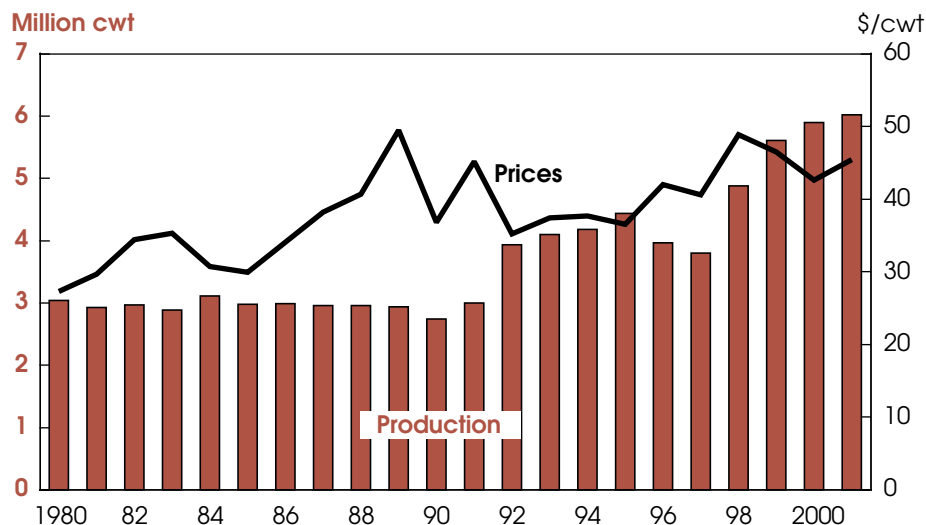
With limited domestic supplies, fresh snap bean prices are generally higher from January to April and are lowest in June and July when supplies become available from multiple areas. Most fresh snap beans are priced on the daily spot market. In contrast, about 98 percent of snap beans destined for canning and freezing are produced under contract between growers and processors.

Although prices are generally higher in the winter than the summer, monthly shipping-point prices display weak seasonalities. This reflects the availability of relatively reliable year-round supplies. It could also reflect the short growing period for snap beans (45 to 60 days), which



## Commodity Spotlight

### U.S. Fresh-Market Production of Snap Beans Has Recently Perked Up



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

allows for quick recovery following weather-related losses (frost, rains).

The season-average price received by growers during 1998-2000 was 14 percent lower than in 1988-90. Since production has been rising, real price declines may be a reflection of gains in productivity, i.e., increased efficiency in the market, hence more output per unit of input. Such efficiency gains may be partly associated with the increased prevalence of mechanical harvesting of fresh-market snap beans over the past decade. For example, machine harvest and marketing costs in south Florida were estimated to be about \$20 per cwt in 1999/2000—virtually the same as manual harvest costs a decade earlier. During this time, variable labor costs more than doubled, likely pushing up manual harvesting costs.

Both exports and imports of fresh snap beans reflect a seasonal influence. The U.S. is the world's top producer of snap beans, with about 60 percent of output,

according to the Food and Agriculture Organization of the United Nations. In addition, the U.S. is the world's leading importer as well as exporter of snap beans. While remaining a net importer in both the canned and frozen markets (where trade plays a smaller role), the U.S. is generally a net exporter of fresh snap beans. In the 1990s, the U.S. exported 11 percent of fresh-market supply, while imports supplied 9 percent of fresh consumption. Imports have trended higher over the past few decades (up 49 percent between 1998-2000 and 1988-90), and exports have more than kept pace (up 114 percent). U.S. export volume is generally steady from October through July, but declines sharply in August and September when Canadian snap bean production peaks.

Fresh imports are strongest in December through March, when U.S. production is limited by cool weather, and are weakest in the summer during the height of the domestic growing season. About 92 percent of import volume arrives from Mexi-

co while about 80 percent of exports are normally shipped to Canada. Under the North American Free Trade Agreement, 2002 is the final year Mexico will face a tariff on fresh snap beans sent to the U.S. (\$0.07/kg). That tariff is in place November 1 through May 31. Meanwhile, Canadian snap beans (6 percent of U.S. snap bean imports) enter duty-free.

### *Fresh Consumption Makes a Comeback*

U.S. consumption of fresh snap beans averaged 519 million pounds annually during 1998-2000, up a respectable 83 percent from 1988-90. Since tumbling to a record low of 1.1 pounds in 1990, per capita consumption of fresh-market snap beans has trended higher. Per capita use climbed to 2.1 pounds in 2000—the highest since 1964, but well below the record-high 5.3 pounds reached in 1943.

Since reaching its apex in 1943, fresh snap bean use in this country spiraled downward for nearly 50 years. But the 1990s brought several changes that snapped the market back to life. Some of these include

- a sustained economic boom with low unemployment and strong income growth;
- the popularity of cuisines viewed as natural and healthy;
- the drive toward use of low-fat foods such as fresh vegetables; and
- increased diversity in the Nation's population.

Low unemployment rates, strong income growth, and low price inflation during the past decade have supported consumer spending on a range of foods. This includes both food away from home and food at home prepared using basic ingredients like fresh snap beans. The strong trend in away-from-home eating helped boost consumption of ethnic cuisines from Asia and Mediterranean countries as consumers sought diversity in their diets.

The 1990s saw new emphasis on cuisines viewed as natural and healthy, such as the so-called "Mediterranean diet." Asian cuisines such as Chinese, Korean, Viet-

Farms growing snap beans range from local small, family operations to large-scale multi-state growers. As is the case with many fresh-market vegetables, some large fresh-market growers have agreements or contracts to provide year-round supply to buyers like retail chain stores and wholesale distributors. This usually means the grower must have farms in several states or have agreements with growers in other states (or countries) to assure year-round supplies.

## Commodity Spotlight

namese, and Indian offered unique dining experiences and new flavors. The use of snap beans in various stir-fry dishes abounded as the wok became a symbol for a healthy lifestyle as well as a principal cooking tool in the American kitchen, supported by a world of recipes readily available on the Internet.

Consumer awareness of the nutritional virtues of vegetables like snap beans has been rising. Snap beans provide Vitamins A and C, potassium, calcium, phosphorus, and fiber, with a one-cup serving containing just 34 calories. Snap beans can be served as a main dish (e.g., stir-fry with meat), a side vegetable, in casseroles and soups, and in a salad mixture with other vegetables. Popular recipes featuring snap beans include green bean casserole, Swiss-style green beans, three-bean salad, stir-fry chicken and beans, shepherd's pie, and pickled green beans.

The surge in snap beans' popularity may also have been boosted by immigration trends over the past two decades. A more diverse population has helped to increase demand for snap beans and expanded the use of snap beans in the diet through the introduction of new cuisines.

### ***Most Snap Beans Consumed at Home***

On a fresh-equivalent basis, Americans consumed 2.1 billion pounds of snap beans during 1998-2000. While canning accounted for 50 percent of this, fresh-market use amounted to 25 percent, or 519 million pounds. According to USDA's 1994-96 Continuing Survey of Food Intakes by Individuals (CSFII), fresh snap beans, like most other foods, are purchased largely at retail for home consumption (84 percent). This likely reflects the dearth of uses for fresh snap beans in fast foods (3 percent of use) as well as competition with less labor-intensive

canned and frozen snap beans for restaurant menus and institutional meals.

In the away-from-home market, U.S. consumers eat snap beans most often in standard full-service restaurants (10 percent of use). As is the case with sweet corn and broccoli, shippers of both fresh and processed snap beans have had little success finding a niche in the expanding fast-food market. This market accounts for less than 3 percent of fresh snap bean consumption and less than 1 percent of canned and frozen snap beans.

Regionally, the South (a 16-state region defined by the Census Bureau) and Northeast (a 9-state region) consume more fresh-market snap beans than do other areas of the country. Southerners consume more than twice as much per capita as westerners and 81 percent more than residents of the Midwest. Based on distributors derived from the CSFII, regional per capita fresh-market snap bean use in 2000 was estimated as follows:

- South, 2.9 pounds per person;
- Northeast, 2.1 pounds;
- Midwest, 1.6 pounds; and
- West, 1.3 pounds.

Low snap bean consumption in the West may reflect the influence of Hispanics, who eat few fresh snap beans, as well as the West's status as national leader in fast-food and other restaurant spending—sectors where snap beans are not well represented.

Metropolitan areas, where 32 percent of the U.S. population resides, accounted for nearly 40 percent of all fresh snap beans consumption. The CSFII indicated that Americans in suburban and rural areas consume about 40 percent fewer fresh

snap beans on a per capita basis than those in metro areas.

Asian Americans consume the greatest amount of fresh snap beans per capita. According to the survey, Hispanics were the only major racial/ethnic group that does not express a preference for fresh-market snap beans. Consumers in the survey's top income bracket report the highest per capita consumption, although the CSFII results suggest that the correlation between income and fresh snap bean use is weak.

Snap bean consumption is greatest among older Americans and weakest among teenagers. In general, there appears to be a positive correlation between age and per capita consumption with per capita use strongest for those 60 and over and weakest for teenagers. A similar pattern was noted for frozen snap bean consumption and canned consumption.

Although the near-term tide of consumption has been shifting higher for fresh-market snap beans, the longer run market appears less certain. At least part of the future success for this crop may be linked to the ability of the industry to entice more Hispanic consumers. With the population base for this ethnic group expected to expand substantially over the next several decades, their current low consumption rate may provide a challenge to the industry. Despite this potential longrun market gap, other factors favor increased consumption over the next several years. If consumer interest in nutrition and healthy lifestyles continues, this should support further growth in fresh snap bean consumption over the next several years.



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Next month in *Agricultural Outlook*

## **2002 Agricultural Prospects**

Based on a presentation at the Agricultural Outlook Forum  
 by USDA's Chief Economist

## World Agriculture & Trade



FAO photo: R. Fadurfi

### Food Aid: How Effective in Addressing Food Security?

**F**ood aid has served as a major tool for the international community in improving food access and reducing suffering from emergency conditions in low-income countries. The 8.5 million tons of food aid provided in 2000 could reduce the projected 2001 gap between food available and food needed to maintain consumption levels in low income countries by as much as 80 percent. The actual impact of food aid is sensitive to its allocation. Analysis by USDA's Economic Research Service (ERS) finds that historical allocations of food aid have been directed more heavily toward countries that have adequate aggregate food supplies but also vulnerable groups unable to purchase the food required to meet their needs. The analysis estimates the potential impact food aid could have on different measures of food security and highlights the importance of targeting food aid resources.

Food security is defined as access by all people at all times to enough food for an active and healthy life. Progress toward global food security objectives has been slow, but food aid can help close the gap between countries' food needs and food availability. How effective have food aid programs been in addressing the needs of recipient countries? What does this imply

for future effectiveness? Analysts at ERS have assessed the food security situation in 67 developing countries, taking into account each country's physical access to food (physical availability) and its economic access (ability to purchase). Five regions were represented in the study: North Africa (4 countries), Sub-Saharan Africa (37 countries), Asia (10 countries), Latin America and the Caribbean (11 countries), and the New Independent States (NIS) of the former Soviet Union (5 countries).

Food security situations in these countries were evaluated by projecting the gaps between estimated food consumption (defined as domestic production plus commercial imports minus non-food use) and two different consumption targets through the next decade using ERS's food security assessment model. The targets are:

- maintaining per capita consumption at the 1998-2000 level (the "status quo target"), and
- meeting recommended nutritional requirements (the "nutrition target") which in most cases would allow a higher calorie diet.

It should be emphasized that the food security assessment makes no assump-

tions about availability of food aid in its projections. Moreover, the measure of estimated nutritional gaps is for calorie consumption alone, without reference to factors such as poor utilization of food due to inadequate consumption of micronutrients or lack of health and sanitary facilities. For the 67 countries included in this analysis, the food needed (in grain equivalent) to maintain per capita food consumption at the 1998-2000 level (status quo) is estimated at about 11 million tons in 2001. The food to meet nutritional requirements is 18.3 million tons.

A "distribution gap" is also estimated because estimated food gaps for individual countries represent average gaps, masking the impact of unequal incomes on food security. This gap represents the amount of food needed to raise food consumption for each income group within each country to the level that meets nutritional requirements. This indicator captures the impacts of unequal purchasing power on food access. It also allows for an estimate of the number of hungry people—those who are consuming below the nutritional target.

The distribution gap—estimated at 31 million tons—is even higher than the other food gaps. Further, 896 million people were estimated to subsist on less than the nutritional requirements in 2001, or 35 percent of the population of the 67 countries.

The analysis revealed Sub-Saharan Africa to be the most vulnerable region, accounting for 23 percent of the population of the countries but 38 percent of the number of hungry people in 2001. That year, about 57 percent of the region's population, or 337 million people, were estimated to be hungry.

On the basis of the food needs assessment, food aid can be evaluated in terms of the proportion of the food gaps (status quo and nutritional gaps) it eliminates. The quantities of food aid and its distribution to recipient countries vary annually depending on the policies of donor nations. Most of the food aid is in the form of cereals. Cereal food aid shipments for 2000 were about 8.5 million tons.

The Asian countries included in this analysis are recipients of the largest share



## World Agriculture &amp; Trade

of aid, nearly 40 percent. Sub-Saharan Africa receives roughly a third, while Latin America and the Caribbean receive less than 10 percent of the aid. The U.S. continues to be the main source of aid, providing 55 percent of the world total (in terms of volume).

Depending upon the future availability of food aid, part of the projected food gaps can be eliminated. Based on aggregate food security assessment estimates for 2001, if food aid levels for that year are the same as in 2000, food aid would fill nearly 80 percent of the calculated gap to maintain per capita consumption (status quo), and nearly half of the nutritional gap. If countries receive the same level of food aid in 2001 as in 2000 (i.e., no change in country or quantity allocations), the estimated number of hungry people would be 691 million rather than 744 million. In other words, based on the current level of food aid, roughly 50 million people may avoid hunger. On the other hand, this underscores that, while food aid can play a useful role in the fight against hunger, its contribution is limited and cannot be the sole remedy to the hunger problem.

Notably, not all of the available food aid is sent to low-income, food-deficit countries. For example, in 2000 about 7.4 million tons, or 85 percent of total food aid, was given to the 67 countries included in this study. The remaining 15 percent was supplied to countries such as Indonesia and Russia which were facing financial crises.

Although the current level of food aid reduces the food gap significantly, the allocations to individual countries do not always correspond to levels of need. Accounting for the disparity are the lack of information or systematic evaluation of the food situation of countries, and absence of coordination among donors and recipients.

To examine the potential effectiveness of food aid in reducing hunger in the study countries, taking into account the needs of individual countries, ERS combined its food security assessment for 2001 with actual food aid data from 2000. This allowed for the calculation of the food gaps that remained after food aid allocations. It was then possible to compare the

## P.L. 480 Helps Supplement Food Supplies

The U.S. provides food aid under three programs: P.L. 480, Section 416b, and Food for Progress. The Section 416b program provides for overseas donations of surplus commodities owned by the Commodity Credit Corporation (CCC) to developing countries. The Food for Progress program authorizes the CCC to finance the sale and exportation of agricultural commodities on credit terms or on a grant basis to support developing countries or emerging democracies. The U.S. P.L. 480 food aid program is the principal vehicle for U.S. food aid and it is comprised of three titles.

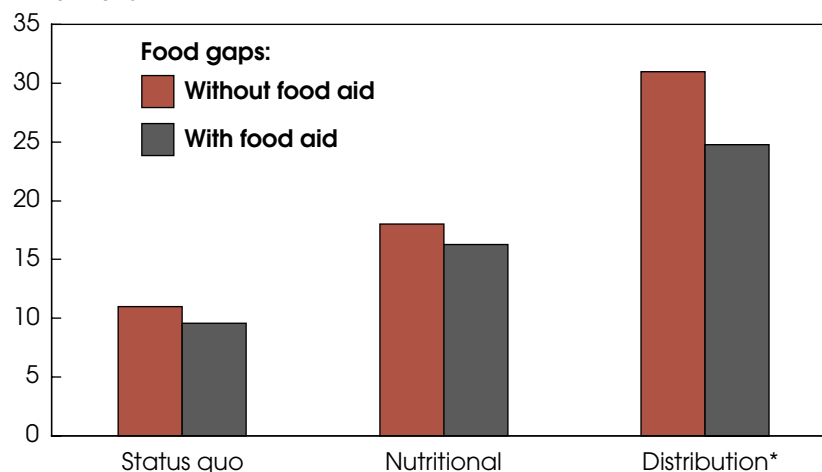
- **Title I** consists of government-to-government sales of commodities under long-term credit arrangements.
- **Title II** provides for donations of commodities to meet humanitarian needs.
- **Title III** provides for government-to-government grants to support economic development for the least developed countries.

Through the 1990s, changes in appropriations for the P.L. 480 programs reflect the emphasis toward humanitarian goals of the programs rather than market development goals. In fiscal year 2001, 86 percent of the value of U.S. food aid appropriations fell under the Title II program as compared to 50 percent in the early 1990s.

On the other hand, the allocation levels of Title I fell steadily during the 1990s, averaging over \$400 million per year early in the decade to roughly \$140 in 2001. Title II varied marginally during the same time period, exceeding \$800 million in most years. Title III is significantly smaller than the other two programs, and there were no allocations in 2001.

## Food Aid is Most Effective in Narrowing the "Distribution Gap"

Million tons



A food gap is the difference between estimated consumption and a specific consumption target. Food aid numbers used in this analysis are assumed to be equal to the amount of food aid each country received in 2000.

\*Distribution gap is the amount of food needed to raise food consumption for each income group within each country to the level that meets nutritional requirements.

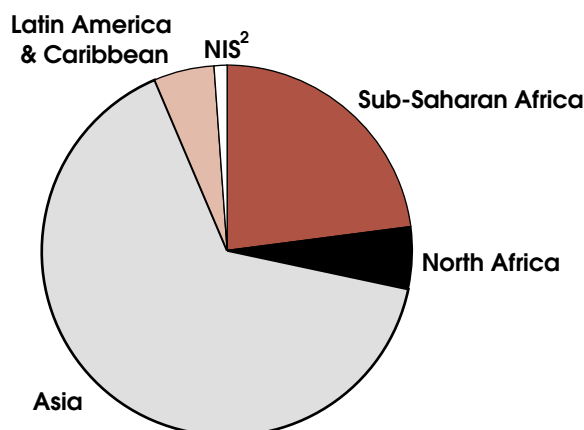
Economic Research Service, USDA

difference in food gaps—the base level without food aid, and the scenario with the actual level of food aid, 7.4 million tons, that the countries received in 2000.

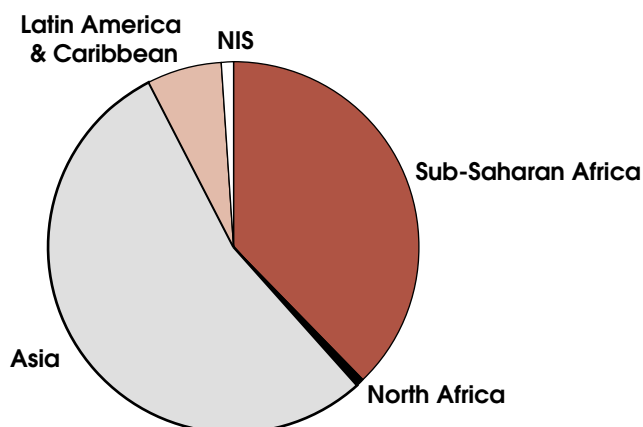
Surprisingly, the analysis showed that these allocations reduced the estimated status quo and nutritional gaps by only 13 and 11 percent, indicating that a relatively

## World Agriculture & Trade

### Sub-Saharan Africa Accounted for Less Than a Quarter of the Population Studied<sup>1</sup> . .



### . . .but Accounted for More Than a Third of the Population's Hungry People<sup>3</sup> in 2001



1. The 67 developing countries in the food security assessment by USDA's Economic Research Service.

2. Five of the New Independent States of the former Soviet Union. 3. Hungry people are those consuming below specific nutritional targets.

Economic Research Service, USDA

small share of food aid was given to countries with status quo and nutritional food gaps as estimated by ERS. The largest decline was in the distribution gap, which was reduced by 20 percent as a result of food aid. In other words, 6.2 million tons (85 percent) of the food aid allocated to these countries went to the countries with distribution gaps—countries facing food insecurity due to the inability of the lowest income groups to access food. This is an impressive achievement. It means that most of the food aid was

given to countries such as India and Bangladesh that did not have any national food gaps (based on status quo and nutritional indicators), but did have a distribution gap, stemming from food access limitations. Although this is consistent with the mission of food aid, the analysis indicates that food aid was not entirely allocated based on the severity of food access problems in regions or countries. For example, the amount of food aid received by countries in Sub-Saharan Africa relative to these countries' distribution gaps

was less than that of the Latin American and Asian countries.

In sum, while food aid does reduce hunger, it clearly falls short of the needs. Allocations of food aid are based on a mix of objectives. Decisions may be affected by such external factors as difficulties in delivering aid and competition from other donation priorities. In addition to the extent of hunger, other factors such as political instability and financial difficulties play an important role in donors' decisionmaking. However, it should be emphasized that because of slow progress in improving global food security—countries' ability to provide or purchase sufficient food—and because of the potential and crucial role of food aid and its limited quantities, it is critically important to improve the targeting policies of donors to maximize the benefits to the recipients.

**AO**

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

The following reports are issued electronically at 4 p.m. (ET) unless otherwise indicated.

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#### March

- 5** *Agricultural Income and Finance Situation and Outlook\*\**
- 6** *Aquaculture Outlook\*\**
- 8** *World Agricultural Supply and Demand Estimates* (8:30 a.m.)
- 11** *Oil Crops Outlook\*\**  
*Cotton and Wool Outlook\*\**  
*Rice Outlook\*\**
- 12** *Feed Outlook (9 a.m.)\*\**
- 13** *Livestock, Dairy, and Poultry Situation and Outlook\*\**
- 20** *U.S. Agricultural Trade Update\*\**  
*Agricultural Outlook (3 p.m.)\**
- 21** *Fruit and Tree Nuts Outlook\*\**
- 26** *Wheat Situation and Outlook Yearbook\**

\*Release of summary.

\*\*Electronic newsletter.

## World Agriculture & Trade



Fawzi A. Taha

### Middle East/North Africa Region: A Major Market for U.S. Feeds

The 20 countries of the Middle East and North Africa (MENA) region provide a substantial market for U.S. coarse grains, oilseeds, and meals. Prospects are for this market to continue growing. During the 1990s, the MENA region became increasingly dependent upon feed imports to support its expanding livestock and poultry production. In 2000, MENA was the largest foreign market for U.S. barley and soybean meal, accounting for 39 percent of U.S. feed barley exports and 21 percent of U.S. soybean meal exports. MENA was also the second-largest market, after Japan, for U.S. corn, receiving 22 percent of total U.S. corn exports. Feed imports are expected to expand further for most MENA countries because of population and income growth coupled with restrictions on imports of red meat and poultry.

#### *Feed Imports Fill Gap Between Production & Demand*

Both demand and supply factors have contributed to MENA's expanding feed imports, and will likely continue to do so, barring major political or economic crises. On the demand side, a rising regional population and an increasing average real GDP growth rate have sustained, and should continue to sustain, strong demand growth for animal products—the catalyst

behind feed demand growth. The region's population, 403 million in 2000, grew at about 2.3 percent per year during the 1990s and is expected to continue growing at around 1.8 percent during the next 10 years. Average annual GDP growth for the region during the 1990s was 4-5 percent, and this also is expected to continue. Although considerable disparity exists in per capita GDP among countries in the region, ranging from as high as \$19,000 in the United Arab Emirates to \$300 in

Yemen, the majority of countries are in the \$1,200-\$2,500 range, where increased incomes will go in part toward increased meat and poultry consumption.

Currently, many countries within MENA maintain restrictive policies on imports of poultry and red meat, including outright bans and/or high import duties, in order to bolster domestic production. Moreover, most Muslims in these countries have a strong preference for domestically produced livestock in order to ensure that the animals are halal (slaughtered according to Islamic rites) and thus suitable for consumption. Also, live or freshly slaughtered poultry is preferred over frozen by many consumers in the region. Strong regional demand for animal products bolstered MENA's output between 1990 and 2000: poultry production grew at an annual rate of 4 percent, red meat at 1.8 percent, eggs at 2.6 percent, and milk at 2.1 percent.

Traditionally, animal feeding in the region relied mostly on grazing and on crop residues such as wheat, rice, and barley straw, and corn, sorghum, and cotton stalks. Only small amounts of coarse grains and oilseed meals were used. With the ongoing modernization of animal feeding and the introduction of feed manufacturing, concentrates such as coarse grains and meals increasingly are replacing traditional feedstuffs. Feed requirements in the region have advanced in step with the livestock and poultry sectors.

However, most MENA countries share the

#### Countries in the Middle East/North Africa (MENA) Region



Economic Research Service, USDA



## World Agriculture & Trade

common circumstance of limited arable land and inadequate water resources, which together constrain the capability to produce feed grains and oilseeds.

### **Feed Imports: A Decade of Expansion**

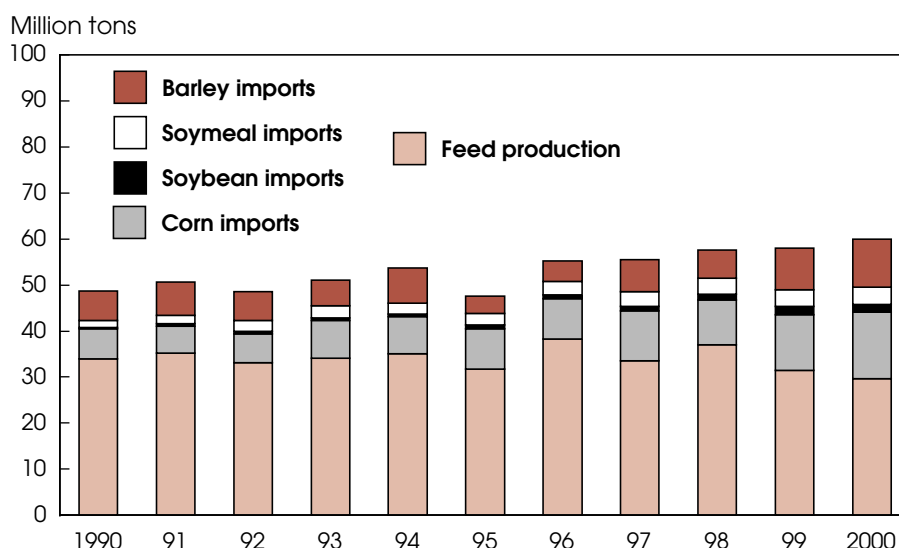
The latest available United Nations trade data indicate that during 1989-2000, MENA imports of total feedstuffs rose from 16 to 33 million tons, and from \$2.6 to \$3.9 billion in value. Seventy-six percent of the imports consisted of coarse grains, 13 percent oilseed meals, and 7 percent oilseeds; the rest included prepared feeds, fish and meat meal, cereal bran, and alfalfa.

**Coarse grains.** MENA's coarse grain imports from all sources in 2000 were mostly yellow corn (57 percent) and barley (41 percent). Yellow corn imports grew at a 11.8-percent annual rate from 5.6 million tons in 1989 to 14.4 million in 2000, overtaking barley imports in 1992. The upsurge in corn imports was due mostly to its use as a feed in the region's expanding poultry production. Barley is used in the region mostly for feeding sheep, goats, and camels.

MENA was the second-largest foreign market for U.S. corn exports in 2000 (after Japan). Between 1989 and 2000, U.S. yellow corn exports to MENA countries more than doubled, from 4.5 million tons to 10.3 million, accounting for 22 percent of total U.S. corn exports in 2000. Egypt was the largest MENA importer of yellow corn, alone accounting for 35 percent of U.S. exports to the region, followed by Algeria and Saudi Arabia (about 10 percent each), and Turkey (7 percent).

MENA's barley imports are inversely related to regional barley production, which is highly dependent on the amount of rain. From 1989 to 2000, the proportion of domestic barley production fluctuated between 59 and 83 percent of MENA's average annual consumption of 23.2 million tons, with the balance imported. U.S. barley exports to the region in 2000 totaled 413,000 tons, or 39 percent of total U.S. barley exports. Although down from 1.3 million tons in 1989, this volume was still large enough to rank MENA as the largest market for U.S. barley exports in 2000. Three-quarters of U.S. barley exports to the region

### **With Feed Use Climbing in the MENA Region, Imports Expanded to Supplement Languishing Production**



Feed production includes corn, barley, oilseeds, and minor feed crops.  
Based on United Nations data.

Economic Research Service, USDA

went to Saudi Arabia, and the rest to Jordan, Morocco, and Tunisia.

MENA's imports of sorghum declined from 736,000 to 180,000 tons during the 1989-2000 period, as countries shifted to yellow corn imports due to a narrowing price differential. Imports of other coarse grains such as rye, oats, and millet were minor.

**Oilseeds.** About 78 percent of MENA's total oilseed imports in 2000 was soybeans, 16 percent was sunflower seeds, and the balance mainly cottonseed. Between 1989 and 2000, soybean imports alone accelerated at a 14.6-percent average annual rate, due mainly to rising demand for both oilseed meals and vegetable oils.

U.S. exports of soybeans to MENA countries increased from 370,000 tons in 1989 to 1.03 million in 2000. Half of U.S. soybean exports to the region were shipped to Israel, which has the largest crushing capacity in the region, another 27 percent went to Turkey, and 13 percent to Egypt. Most other countries in the region, with inadequate or inefficient crushing facilities, prefer to import soybean meal ready for feeding.

Imports of sunflowerseed jumped from 4,200 tons in 1989 to over 500,000 tons in

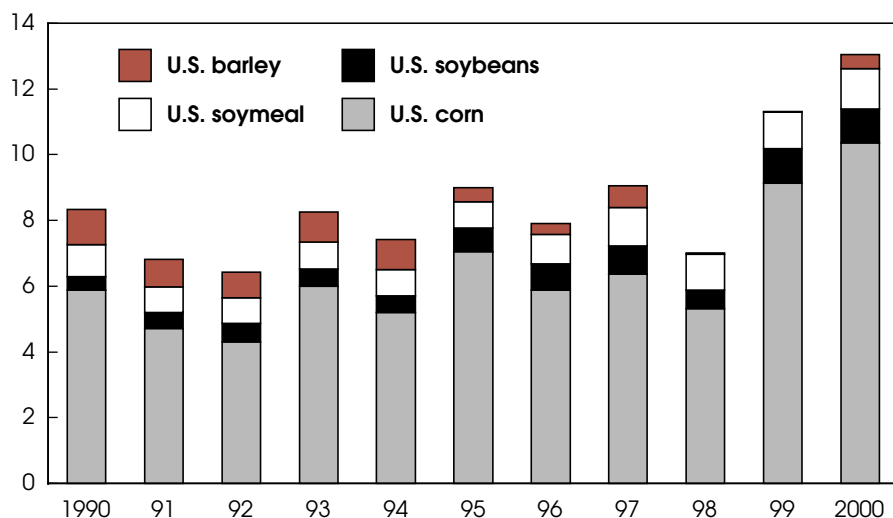
2000, with Russia, Argentina, and Romania as the major suppliers. Exports to the region represented 12 percent of U.S. total sunflower exports in 2000. Turkey was the largest single importer of sunflowerseed, receiving more than 88 percent of MENA's total, followed by Morocco (5 percent), and Israel (3 percent). Imports of other oilseeds were minor.

**Oilseed meal.** MENA's total oilseed meal imports more than doubled from 1.8 million tons in 1989 to 4 million in 2000. Soybean meal dominated the imports, followed by very small percentages of sunflower, cottonseed, rapeseed, and linseed meals. Lack of crushing facilities in most countries of the region encouraged the import of meals ready for livestock and poultry feeding without the need for any further domestic processing.

In 2000, MENA was the largest export market for U.S. soybean meal, receiving 1.2 million tons, or 21 percent of U.S. total soybean meal exports. The second- and third-ranked markets were the Philippines (15 percent) and Canada (14 percent). One-quarter of U.S. soybean meal shipments to MENA went to Saudi Arabia, followed by Egypt and Turkey, with 20 percent each.

## U.S. Exports of Feed to the MENA Region Expanded During the 1990s

Million tons



Economic Research Service, USDA

## MENA's Feed Production Shows Mixed Results

**Coarse grain production ebbing.** Despite increasing demand for coarse grain, the region's long-term trend upward in coarse grain production seems to have ebbed during 1989-2000. Production at the end of the period was actually about 24 million tons, down over 4 million tons from the beginning. However, the drop was due mostly to barley, which varies considerably from year to year due to the yield effect of rainfall on the mostly rain-fed production.

In contrast to barley, higher yields for corn pushed corn production in the region up marginally from 8.5 million tons in 1990 to 10.6 million in 2000. Sixty percent of corn output was produced on irrigated land in Egypt. Future expansion of corn area in MENA is expected to be marginal because of limited availability of irrigated land with secure water supplies. Other coarse grains such as sorghum, oats, and rye together accounted for less than 10 percent of the region's coarse grain production in 2000.

**Oilseed production increased marginally.** Oilseeds produced in the region include cottonseed, sunflower, soybeans, rape, and other minor oilseeds such as linseed, peanuts, and sesame. While the region's demand for oilseeds was strong through-

out the 1990s, production increased only 6.7 percent to 5.7 million tons. Cottonseed made up 75 percent of the region's oilseed production, half of which was produced in Turkey. Sunflower (18 percent) and soybeans (4 percent) followed. Soybeans are new to the region, and farmers consider current yields too low to compete with other crops for the use of land.

### Oilseed meal crushing expands.

Although oilseed production in the region only increased marginally, crushing volume expanded substantially from 2 million tons in 1990 to 3.4 million in 2000. The expansion was due mainly to new soybean crushing facilities in Israel, Iran, Turkey, and Morocco, which relied mostly on soybean imports. The trend toward greater crushing continues throughout the region, with at least 11 new soybean processing plants in various stages of construction. These new crushing facilities will rely totally or heavily on soybean imports, adding further to the region's growing imports of soybeans.

With the expanding crushing capacity, MENA's soybean meal production rose rapidly from 474,000 tons in 1990 to 1.4 million tons in 2000. In 2000, soybean meal made up 42 percent of the region's total meal production, ahead of cottonseed meal at 31 percent. Sunflowerseed meal ranks third in production of oilseed meals in the region, and is crushed predominate-

ly in Turkey. In addition, the region produced small amounts of oilseed meals mostly from domestically cultivated crops such as rape, flax, sesame, peanuts, and corn.

## Competition Intensifies for The MENA Feed Market

In 2000, the U.S. was the largest single supplier of corn and soybeans to the region, the second-largest supplier of soybean meal, and the sixth-largest supplier of barley. U.S. share of the region's corn imports was 66 percent, down from 80 percent in 1989. Argentina, the second-largest supplier, shipped 24 percent of the imported corn, up from zero in 1989. Other suppliers were Canada, Hungary, Romania, and occasionally China.

Until 1997, when Argentina and Brazil began making inroads, the U.S. supplied almost all of MENA's soybean imports. While the U.S. managed to remain the largest single soybean exporter to the region, with 60 percent of the market in 2000, Brazil had 27 percent of the market that year and Argentina 4 percent.

In MENA's soybean meal market since the early 1990s, major U.S. competitors have been Argentina and Brazil. In 2000, Argentina supplied 50 percent of the imports, followed by 32 percent from the U.S. and 11 percent from Brazil. U.S. import share was down from 63 percent in 1989. U.S. credit guarantees that had boosted U.S. soybean meal exports to the region now compete with lower prices from Argentina and Brazil.

MENA's dependency on feed imports is expected to increase in the future, and will result in further increases in corn, soybean, and soybean meal imports as domestic production of livestock and poultry expand to meet rising demand. In the longer run, improvements will occur in the region's domestic feed production (greater use of improved crop varieties and cultivation practices) and in livestock and poultry production efficiency, which may reduce the dependency marginally. Even so, the bottom line will be expanding feed imports. The U.S. will continue to be a major supplier, but will have to face price competition from other countries, notably Argentina and Brazil. **AO**

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## Policy



## Farm Income, Finance, & Credit Outlook for 2002

The overall financial state of the U.S. agricultural sector is sound, as evidenced by continuing increases in asset values and equity levels. Farm business assets are forecast to surpass \$1.228 trillion, increasing nearly \$12 billion from 2001. Farm business debt is anticipated to approach \$197 billion, up from \$192.8 billion in 2001, while farm business equity (assets minus debt) is expected to rise to \$1.032 trillion in 2002, a gain of almost \$8 billion.

In the face of relatively low commodity prices, the farm business balance sheet has shown steady gains throughout 1999-2001. During this 3-year span, total direct government payments (including disaster, conservation, production flexibility contracts, loan deficiency, and marketing loan gains) contributed more than \$65 billion to the incomes of farmland owners, supporting farm incomes and farmland values. In contrast, investors in U.S. equity markets have witnessed increasing market volatility and lost considerable net worth, especially since March 2000.

From the beginning of 1999 through the end of 2001, however, farmland owners have benefited from a \$111-billion increase in farm equity, driven largely by a \$116-billion rise in farm real estate val-

ues. Since land values largely reflect expected future earnings from farming, the recent strength of land values suggests that farmland owners do not anticipate a significant decline in incomes in the foreseeable future.

Net cash income (before government payments) is expected to increase for the third straight year and exceed \$40 billion for the first time since 1998. In 2002, livestock receipts are expected to improve by over \$10 billion and crop receipts by \$5 billion from their lows in 1998 and 1999, respectively. Cash receipts are expected to be up about \$1 billion for feed grains and oil crops. Cotton and rice are the only major crops with prospects of lower 2002 cash receipts. Relatively low feed costs, strong domestic demand, and gains in export sales have encouraged higher pork and beef output. Receipts from sales of dairy products are forecast to retract by \$2.3 billion in 2002, after a \$4.1 billion gain last year.

Since Congress was debating the next farm bill as USDA prepared its 2002 financial outlook, current law guided the forecast of direct payments—assumed to be \$10.7 billion for 2002. Boosted by emergency assistance and loan deficiency payments (LDPs), government payments

have exceeded \$20 billion in each of the last 3 years. Emergency assistance payments result from separate legislative initiatives enacted in 1999, 2000, and 2001 in response to the economic adversity that farmers were facing. LDPs are intended to be countercyclical with commodity prices, and are determined using the gap between trigger prices and market prices. As a result of higher prices projected for several major program crops, LDPs are expected to decline by 25 percent in 2002.

Relative stability in production expenses is also a contributing factor to higher net incomes. Major crop-related expenses (seeds, fertilizer, and pesticides) are forecast to be \$26.9 billion in 2002, 1.6 percent below 2001. Fertilizer prices are slated to fall about 5 percent, while small increases will likely occur in seed and pesticide prices. Fuel expenses are a major cost factor for farmers producing crops requiring frequent cultivation and/or drying, such as corn. After jumping \$1.6 billion (29 percent) in 2000 as a result of a rise in crude oil prices, fuel expenses are forecast down 7 percent in 2001 and another 2 percent in 2002. For livestock producers, feed represents one of the largest input costs. Following a 7-percent jump in 2001, feed expenses are forecast to rise 8 percent in 2002.

### *Income Prospects Reflect Farm Diversity*

Farm-sector net cash income for 2002 is projected to decline by 15 percent and is not likely to be evenly distributed across all farm operations. The largest gains in crop receipts are projected for corn and soybeans, while cotton and rice are expected to record the largest 2002 declines. Three factors will determine the impacts on individual operations:

- their mix of crop and livestock enterprises;
- the extent to which government payments contribute to gross income; and
- the relative importance of expense items that are forecast to increase (such as feed and labor) versus those expected to decline (such as fertilizer and interest).

Among these factors, the largest impact on the economic outlook for 2002 will be



determined by the level of government payments. Assuming no emergency assistance, the 50-percent drop in government payments will most negatively impact incomes on those operations where payments account for the largest share of gross income. These include farm businesses that specialize in wheat production (with an average of 30 percent of gross cash income from government payments), corn and other cash grains, and soybeans (at least 20 percent of gross cash income). Regional dependence on government payments also varies and generally reflects the concentration of program commodity production.

To gauge the sensitivity of the forecasts, an analysis of total direct payments was conducted in which hypothetical payments were incrementally increased by \$1 billion up to a total of \$10 billion more than assumed in the forecast. Limiting the analysis to commercial farms (i.e., excluding retirement, limited-resource, and rural residence farms) permits more focused study of the impact of changes in government payments on those farms generating the bulk of U.S. agricultural production.

For all farm businesses, \$5 billion in additional government payments, which are assumed to be distributed as they have been historically, would change the outlook for net cash income from a decline of 18 percent to a decline of 8 percent relative to 2001. Adding \$10 billion to government payments (which brings the level of total payments near the amount paid in 2001), would result in average net cash incomes for farm businesses nearly 2 percent higher than in 2001.

Direct government payments have historically been associated with production of program commodities, and have not been evenly distributed across all regions and farm types. Farms in the Heartland, Northern Great Plains, and Prairie Gateway have traditionally been large producers of program crops, and received a large share of payments. USDA's 2000 Agricultural Resource Management Study (ARMS) indicated that these regions accounted for 42 percent of all U.S. commercial farms, but received 68 percent of government payments.

### How Would Alternative Levels of Government Payments Affect Farmers' Net Cash Income?

	Income	Relative to 1996-2000 average	2002 income forecast		
			Alternative government payment levels		
			Base	+ \$5 billion	+ \$10 billion
	\$ per farm	%	% change from 2001 income forecast		
<b>All farm businesses*</b>	31,700	-23.4	-18.3	-8.0	1.8
<b>Resource region</b>					
Heartland	28,400	-33.3	-21.3	-4.4	11.6
Northern Crescent	42,200	-0.2	-19.9	-14.8	-10.1
Northern Great Plains	20,100	-52.5	-33.9	-9.8	12.6
Prairie Gateway	25,200	-28.4	-19.5	-4.2	10.4
Eastern Uplands	11,800	-15.7	-13.2	-8.8	-4.6
Southern Seaboard	25,000	-9.1	-15.5	-9.6	-3.8
Fruitful Rim	66,800	-20.5	-10.6	-7.2	-4.0
Basin and Range	33,000	-0.6	-3.2	4.2	11.4
Mississippi Portal	12,500	-73.8	-52.1	-24.3	2.1
<b>Commodity specialization</b>					
Mixed grain	21,500	-52.0	-37.7	-8.9	18.1
Wheat	14,300	-60.2	-53.4	-18.5	14.5
Corn	22,500	-49.6	-27.7	3.0	32.0
Soybeans	13,600	-54.1	-32.3	-4.9	20.9
Tobacco, cotton, and peanuts	24,700	-44.4	-30.2	-15.4	-1.4
Other crops	25,000	-23.3	-17.5	-4.3	8.2
Specialty crops	74,200	-21.1	6.0	7.5	8.9
Beef cattle	14,300	-8.9	3.6	14.4	24.8
Hogs	64,000	-10.6	-22.4	-16.2	-10.4
Poultry	128,200	34.9	-5.0	-4.6	-4.2
Dairy	67,400	-8.4	-35.1	-31.9	-28.9
Other livestock	14,300	68.2	-14.9	-8.2	-1.8

\* Excludes retirement, limited-resource, and rural residence farms.

Economic Research Service, USDA

Not surprisingly, sensitivity analysis suggests that farms in these regions would be the prime beneficiaries of increased levels of government payments. In the Northern Plains, 2002 average net cash income is currently projected to be 34 percent below 2001. An additional \$10 billion in government payments would produce an average net cash income 13 percent above 2001. Similar results occur in the Heartland, where average net cash income would rise 12 percent due to additional payments compared with the currently projected 21-percent decline; in the Prairie Gateway, the current 20-percent income decline would change to a 13-percent gain.

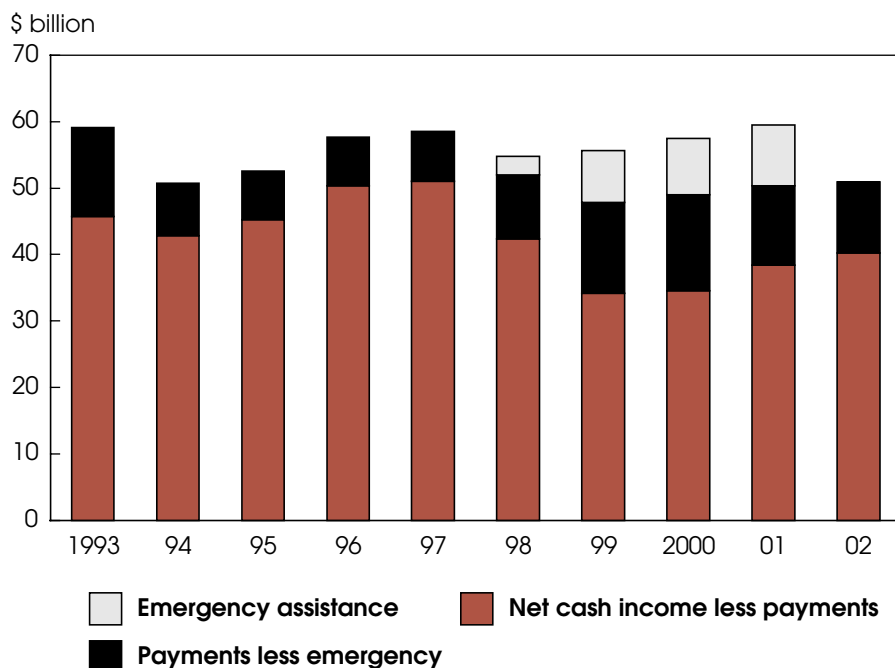
Crop farms account for 49 percent of all U.S. commercial farms but receive 76 percent of government payments, and not all crop farms benefit equally. The 26 percent of farms classified as wheat, corn, soybean, and mixed grain operations jointly receive 60 percent of all payments, while the 10 percent of farms producing specialty crops receive less than 3 percent.

Only specialty crop and beef producers are projected to see higher average net cash incomes in 2002 than in 2001. While specialty crop income gains of 6 percent are expected (assuming current payment levels), a \$10-billion increase in payments would result in only a 9-percent increase. Average net cash incomes of beef producers are expected to rise 4 percent in 2002, and, since farms classified as beef operations traditionally receive about 11 percent of government payments, increasing payments by \$10 billion would generate a 25-percent income gain.

Given current government payment assumptions, corn producers are expecting a 28-percent drop in average net cash income in 2002. Adding \$10 billion in government payments would result in average net cash incomes of corn producers rising 32 percent in 2002. Similarly, adding \$10 billion would improve average net cash income for producers of wheat (from a currently projected 53-percent decline to a 14-percent increase), mixed

## Policy

### Farm-Sector Net Cash Income, Excluding Government Payments, To Rise for Third Consecutive Year



2001 and 2002 forecasts.

Economic Research Service, USDA

grains (from a 38-percent decline to an 18-percent rise), and soybeans (from a 32-percent decline to a 21-percent increase).

Livestock producers typically do not receive proportional benefits from government payments. More than half of all farms are livestock operations, but they receive less than one-fourth of payments. In 2002, dairy farms are projected to generate average net cash income 35 percent below 2001 levels. Since dairies traditionally receive little benefit from direct government payments, adding \$10 billion would still result in a 29-percent decline in average net cash incomes.

#### **Financial Condition of Farm Operator Households**

After rising each year in the late 1990s, farm household income leveled off last year and is expected to decline slightly this year. However, this minimal drop is much less than the decline expected for the average U.S. household.

To analyze the sensitivity of farm households to changes in the outlook for farming and the economic status of the general economy, four groups were identified based on their relative diversity of income sources. All farm operator households were included. Fewer than one in four of all U.S. farm households earn more than 20 percent of income from the farm business. Farming is the primary source of household income (80 percent or more) for only about 12 percent of farm households. These farms account for 52 percent of total production and received 42 percent of direct government payments. Another 13 percent of farms have proportionate levels of farm and off-farm earnings. This group accounts for 26 percent of farm output and 32 percent of total direct payments.

How off-farm incomes will be affected by changes in the national economy depends heavily on the source of their income, as well as the speed and extent of the current economic recovery. In the 2000 ARMS, about 80 percent of operators (70 percent of spouses) who worked off farm reported an average workweek of more than 35

hours. If their primary occupation has been directly affected by the economic slowdown, they have likely faced greater income reductions than other farmers who earn a much larger share of total household income from farming.

Off-farm wages and salaries represent the primary source of income for 45 percent of farm households. Off-farm job opportunities vary by region. In the Northeast there are durable goods manufacturing plants. The recent slowdown in demand for products such as machinery, equipment, autos, and trucks will be felt by farmers and/or spouses who may have jobs in these industries. In the more rural Midwest, farmers and spouses may more commonly be working in retail trade and services, where layoffs or cutbacks may be less severe than in manufacturing. Across the country, U.S. Labor Department survey data are showing employment growth in health services but declines in transportation and no change in construction.

Many smaller farms are located in the South, which has seen its textile industry eroded by overseas competition. More recently, automobile manufacturing and its input suppliers have moved into the South, but these jobs tend to be located around more urban areas where educational levels of workers are higher and where transportation is readily available. The automobile business has been especially hurt by the recession, and workers in this sector will be affected in the coming year. Spouses or operators working in medical services or in teaching will likely see little if any decrease in earnings as these professions tend to be recession-proof in the short run. However, the food and beverage sector has been hit hard by current economic conditions, certainly in the hotel and motel businesses, and those farm households receiving wages and salaries from this sector will likely be hit in 2002.

Another 30 percent of farm households derive most of their income from interest, dividends, and other nonfarm businesses. Recent drops in interest rates have benefited borrowers but have hurt those dependent on interest and dividends as a source of income. This most likely would affect older farmers who are retired or

neering retirement and who are more dependent on interest income from investments to supplement Social Security or other savings.

Farm households most dependent on farming had the lowest average household income. At \$35,800, their income was below the average for nonfarm households, while groups that rely less on farming as a source of income had average incomes exceeding nonfarm households. On average, income from farming was negative for households where earnings from off-farm jobs and investments were the dominant sources of income.

### ***Government Payments & the Ability to Service Debt***

Farm business debt is projected to rise about 2 percent in 2002, following an estimated 4.8-percent increase in 2001. Anecdotal evidence suggests that farmers may be refinancing farm debt, and converting nondeductible personal debt to farm business debt.

Expansion of Farm Credit System (FCS) lending is contributing to the anticipated rise in farm debt in 2001. Annual changes through the end of the third quarter suggest that FCS debt levels can be expected to surge almost \$6 billion (12 percent) in 2001. FCS loans are projected to rise another \$1 billion in 2002. Bank lending is expected to grow slightly above 2 percent in 2002, after 3-percent growth last year.

About 21 percent of all U.S. commercial farms are expected to experience debt repayment problems in 2002. Since many of these operations carry much more debt than they can service with current income, increasing government payments by \$10 billion is projected to only reduce this number to 19 percent. The additional payments would have the greatest impact in the Northern Great Plains, where 28 percent of farms are projected to have repayment difficulty. About 23 percent of farms in this region would have repayment problems after an infusion of an additional \$10 billion in payments. Similarly, increased payments would lower the number of Heartland operations experiencing repayment problems from 24 percent to less than 21 percent.

Wheat and corn growers are projected to account for the largest percentage of producers with repayment difficulties in 2002. The number of wheat producers experiencing repayment problems would rise, in the absence of additional government payments, from 27 percent in 2001 to 37 percent in 2002. An additional \$10 billion in payments would reduce this to 29 percent. The share of corn producers with repayment problems is projected to rise from 27 percent in 2001 to 30 percent in 2002; an additional \$10 billion in funding would result in loan service problems for only 23 percent of corn producers.

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### **IN UPCOMING ISSUES OF AGRICULTURAL OUTLOOK...**

- Farmland protection programs and the value of rural amenities
- Income, wealth, and well-being of farm operator households
- Land quality, ag productivity, and food security

### **March Releases—National Agricultural Statistics Service**

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

[www.ers.usda.gov/nass/pubs/pubs.htm](http://www.ers.usda.gov/nass/pubs/pubs.htm)

#### **March**

- 1** Dairy Products Prices (8:30 a.m.)  
Milkfat Prices (8:30 a.m.)  
Livestock Slaughter - Annual Summary  
Poultry Slaughter
- 4** Dairy Products (Egg Products)
- 5** Weather - Crop Summary (noon)
- 6** Broiler Hatchery
- 8** Crop Production (8:30 a.m.)  
Dairy Products Prices (8:30 a.m.)
- 12** Weather - Crop Summary (noon)
- 13** Ag Chemical Usage - Post-harvest Applications - Wheat  
Broiler Hatchery  
Turkey Hatchery
- 14** Potato Stocks
- 15** Dairy Products Prices (8:30 a.m.)  
Milkfat Prices (8:30 a.m.)  
Cattle on Feed  
Milk Production
- 19** Weather - Crop Summary (noon)
- 21** Broiler Hatchery  
Cold Storage
- 22** Cotton Ginnings (8:30 a.m.)  
Dairy Products Prices (8:30 a.m.)  
Catfish Processing  
Chickens and Eggs  
Hop Stocks  
Livestock Slaughter  
Monthly Agnews
- 26** Weather - Crop Summary (noon)
- 27** Agricultural Prices  
Broiler Hatchery  
Peanut Stocks and Processing
- 28** Grain Stocks (8:30 a.m.)  
Prospective Plantings (8:30 a.m.)  
Rice Stocks (8:30 a.m.)  
Dairy Products Prices  
Milkfat Prices  
Quarterly Hogs and Pigs



## Special Article

## Safety Nets: An Issue in Global Agricultural Trade Liberalization

Global trade liberalization is expected to benefit many countries, including those developing countries that are net agricultural exporters and are able to respond to expanded market opportunities. Other low-income countries, however, have argued that their food security could be adversely affected by the reforms and have lobbied for some form of food-safety net or compensation. This issue was discussed in the Uruguay Round of international trade talks and is on the agenda of the current round.

During the previous round of trade negotiations, several studies on the potential impact of agricultural trade liberalization concluded that world food prices for a few key commodities would rise and possibly become more volatile as surpluses drop. If both results occur, low-income countries could experience greater food insecurity. Even without greater price volatility, an increase in food prices may escalate the problems of import financing for low-income countries that spend a significant share of their budgets on food imports and whose domestic production is highly variable.

Given these food security concerns, many developing countries have argued for improvement in safety net policies to minimize the impact of trade liberalization on their consumers. These concerns were discussed in several forums, namely the 1996 World Food Summit and the World Trade Organization (WTO) meetings. The result was a provision in the Marrakech Agreement that recognized concerns and initiated steps to improve international safety net mechanisms.

### *What are the Available Safety Net Programs?*

Food importing countries have used safety nets provided by a range of programs in the past. Some of the programs continue while others have been revised or discontinued.

**Food aid.** Food aid has a long history and is the most important international food safety net program. The magnitude and role of food aid has changed through time, but its mission to address both chronic and transitory food insecurity has remained the same. Food aid was first provided to developing countries in the 1950s as the U.S. disposed of grain surpluses. For producers and exporters, food aid became a desirable policy choice because reductions in commodity surpluses usually boosted market prices. As commercial exports increased over time, the role of food aid diminished as a means of reducing commodity surpluses.

All food aid donors cite humanitarian relief as their basic distribution criteria, but economic and political considerations have also played important roles in allocation decisions. The commodity mix of food aid usually reflects the export profile of the donor country and tends to vary with yearly fluctuations in availability. Cereals (mainly wheat) are by far the largest category of



FAO photo

food aid. Currently, the major donors of grain food aid are the U.S., the European Union (EU), Canada, Japan, and Australia. The U.S. continues to provide food aid in commodity form, while the EU and Canada provide their food aid on a grant basis. Japan provides financial assistance for food aid programs such as the World Food Program.

The future of food aid is uncertain. One concern is the increasing cost of food aid as further global trade liberalization reduces or eliminates support prices and food surpluses in donor countries. The U.S. and EU—the two largest food aid donors—agree that food aid should be provided to the least developed net food importing countries. However, rising food prices in the future could reduce food aid volumes unless donor countries increase budgetary appropriations. Food aid volumes have not been sufficient to meet estimated needs in the past. With a growing gap between food needs and food availability in many low-income countries over the next decade, food aid will likely cover a smaller proportion of that gap.

**EU's STABEX program.** The EU conceived STABEX as a safety net program for low-income countries that were mostly former European colonies. However, the program has turned out to be more of a development program than a safety net program. Selected developing countries receive compensation when export earnings are below average (compared with recent trends). Compensation is provided as project grant aid, which is administered by local EU officials in cooperation with local country officials. Critics of the program point to inadequate funding, slow processing, and a rigid formulaic approach that ignores the impact on local reform processes. The EU recommended in 1996 that the program be modified or discontinued.

## Special Article

**International Monetary Fund's (IMF) Compensatory and Contingency Financing Facility (CCFF).** The CCFF program provides compensation to countries either when global food prices have been unusually high or export earnings unusually low. One shortcoming has been that each country's compensation is limited to its share of available IMF funds. Another shortcoming has been that the IMF must first determine that a country's high food import costs or low export earnings are not the result of economic mismanagement. The time required for this determination has contributed to delays in processing country financial support requests. The program was little utilized in recent years (about two countries per year over 1993-99) and was terminated in 2001.

### New Safety Nets Proposed

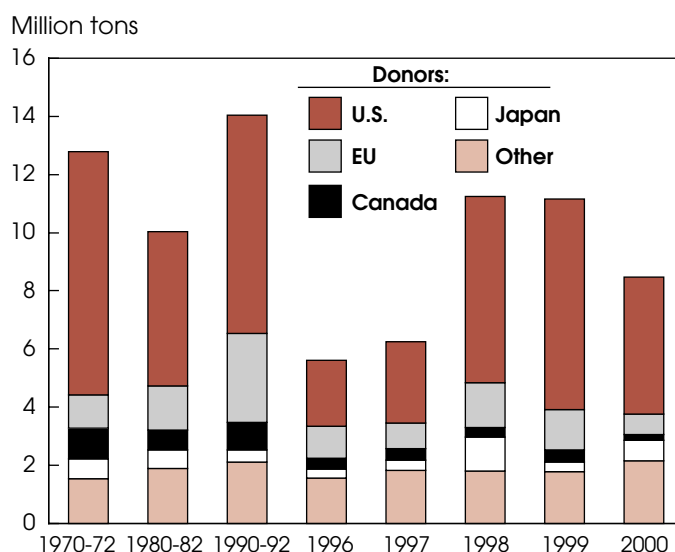
At the WTO meeting of trade ministers in November 2001, developed countries generally showed support for the broad goal of improving food security safeguards for low-income countries, but did not reach agreement on particular mechanisms to achieve this goal. Before the meeting, several new proposals were submitted to the WTO Committee on Agriculture. The EU proposed improving the effectiveness of food aid by making it available only to food-insecure low-income countries, and by requiring that it be provided only on a grant basis. Nigeria and South Korea proposed increasing the volume of food aid. Japan and Mauritius suggested creating an international grain reserve to reduce food price volatility. Several developing countries proposed that food-insecure countries be exempted from restrictions on domestic production subsidy programs. Egypt favored an international financial rebate system that would compensate food-insecure countries for costly food import bills. Other proposals called for reducing the financial burden on developing countries of transitory food import shocks.

Most of the proposals are "ideas" and are difficult to compare in terms of their operation and targeting. However, three proposed mechanisms have drawn recent attention.

**International derivatives for grains.** The goal of this proposal would be to stabilize food import prices by designing new derivatives (puts and calls) that give food-insecure countries the option to buy or sell food at either current market prices or at predetermined prices (purchased options). The options would help food insecure countries purchase food at more predictable prices. The program would protect countries against import price hikes, but not necessarily against import costs that result from their own domestic production shortfalls. Creative derivatives might need to be developed, such as an option to purchase grain 15 months in advance of the harvest (presently not available). A fund that subsidizes the options probably would be necessary. Developed countries could help in the design and funding of the program.

**Revolving fund/financial rebate system.** Under this proposal, food-insecure countries would be reimbursed from an international fund if food import costs for a selected basket of products exceeded a threshold. For example, if a country's total import costs were 10 percent above trend import costs, the country would receive compensation for the difference. The Food and

### Food Aid (Cereals) Varies by Year, Largely Reflecting Production Surpluses of Donors



Based on data from the Food and Agriculture Organization of the United Nations. Data for 1970 through 1992 are annual averages.

Economic Research Service, USDA

Agriculture Organization of the United Nations estimated that such a program covering 65 food-insecure countries would have cost about \$429 million per year over the 1989-99 period.

**Import insurance program.** Under this program, a variation of the financial rebate system, food insecure countries would pay annual premiums according to a predetermined historical risk profile. Depending on coverage options, countries would receive compensation whenever import costs exceed a threshold for a preselected consumption target. For one standard option, USDA recently estimated that program costs for 67 food-insecure countries would have been about \$450 million over the 1988-97 period. The program would require a one-time startup cost of about \$2-\$3 billion to keep the fund solvent, after which the program would be self-financing with the collection of each country's premiums.

**Comparing these proposals with food aid.** Estimated costs of either the revolving fund or the import insurance program, \$429-\$450 million annually, can be compared with the latest food aid budgets. The combined food-aid budgets for the five major donors (Australia, Canada, EU, Japan, and the U.S.) totaled an estimated \$2.9 billion in 1998. Hypothetically, it would be more cost-effective to channel these same food aid budgets into some of the proposed options, even if donor countries paid nearly all the costs.

All of the proposed programs would involve numerous administrative issues that would need to be addressed before deciding on the program or programs to implement.

## Special Article

### *Defining Food-Insecure Countries*

The Uruguay Round's Marrakech Agreement recognized the special needs of Least Developed Countries (LDCs) and the Net Food Importing Developing Countries (NFIDCs). In particular, the signatory countries agreed to review food aid periodically; ensure that an increasing proportion of foods is provided concessionally to LDCs and NFIDCs; and provide technical and financial assistance to these countries. Additionally, the signatory countries recognized that LDCs and NFIDCs may be eligible to "draw on the resources of existing international financial institutions under existing facilities, or such facilities as may be established."

The agreement raises two key questions: What are the criteria used to place countries in LDC and NFIDC categories? Are these categories synonymous with food insecurity? Answers to these questions are important for targeting food-insecure countries and determining the costs of various programs and proposals.

The United Nations determines which countries are considered LDCs (presently there are 48 countries). A variety of socioeconomic indicators are used in the determination, including per capita income, size of the manufacturing sector, literacy rates, a quality-of-life index, economic diversification, and population size. While the LDCs are undoubtedly poor and likely to be food insecure, they are not specifically identified as such.

The WTO's Committee on Agriculture makes the determination of which countries are considered NFIDCs (presently there are 18 countries). Specifically, countries that wish to be considered an NFIDC must petition the Committee and provide data to support the claim that they are net food importers of basic food items. While these 18 countries are particularly vulnerable to trade liberalization effects, there are undoubtedly many others that are food insecure and would be affected by trade liberalization.

Recently, the International Food Policy Research Institute (IFPRI) completed a study suggesting that countries should be more carefully classified and targeted in international treaties. Several criteria were used to classify the countries as food insecure, including per capita food production trends, the ratio of total exports to food imports, average calories consumed per capita per day, average proteins consumed per capita per day,

and the share of the nonagricultural population. Using these criteria, IFPRI classified 74 food-insecure countries into four categories reflecting different degrees of insecurity.

While there is clear overlap in these country classifications, a careful identification of food-insecure countries would be helpful in targeting safety net programs and in minimizing program costs. Though not cited in international treaties, USDA also monitors annually the food security situation in 67 developing countries around the world. These 67 countries largely overlap the 74 countries identified in the IFPRI study. The countries monitored by USDA have been selected primarily because they have received U.S. food aid in the past.

### *New Food Safety Nets Will Support Trade Liberalization*

While trade liberalization has the potential to improve the food security of developing countries, low-income countries that are not strong participants in global food and agricultural markets will remain vulnerable to price shocks and food insecurity. Presently, the international safety nets that do exist are inadequate to stabilize food supplies for the more vulnerable countries. Food aid has been the primary safety net, but is not sufficient to meet estimated needs around the world. With food gaps projected to grow wider in the future, the problem likely will only worsen. The few alternatives to food aid that have been implemented so far have been underutilized or highly ineffective.

New safety net proposals could help stabilize grain import prices or manage import costs. Recent estimates of selected proposals suggest that the costs could be much less than those of current programs. The costs of new proposals will vary depending on the type of safety net program and the countries targeted. In turn, the number of eligible countries will vary depending on the selection criteria. Improving international safety net programs may not only temper food security concerns, but also generate support among low-income countries for further trade liberalization.



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## For more information

### *Food Security Assessment, 2001*

A forthcoming ERS publication

- The impact of widespread food production shortfalls in 2001 on low-income food-insecure countries
- Special report on China: Market reforms, policy initiatives and food security

Watch for it this month on the Economic Research Service web site [www.ers.usda.gov](http://www.ers.usda.gov)

### *Issues in Food Security*

Series of concise papers summarizing ERS research on global food security assessments; international food aid; natural resources and productivity; trade liberalization; and other topics [www.ers.usda.gov/publications/aib765/](http://www.ers.usda.gov/publications/aib765/)

### *Policy Options to Stabilize Food Supplies: A Case Study of Southern Africa*

A range of safety net options and their costs [www.ers.usda.gov/publications/aib764/](http://www.ers.usda.gov/publications/aib764/)

### Web briefing rooms

*Developing countries in the World Trade Organization*  
[www.ers.usda.gov/briefing/WTO/DevelopingCountries.htm](http://www.ers.usda.gov/briefing/WTO/DevelopingCountries.htm)

### *Global food security*

[www.ers.usda.gov/briefing/globalfoodsecurity/](http://www.ers.usda.gov/briefing/globalfoodsecurity/)



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# USDA's Projections for 2002 and for 2002-11



## USDA Agricultural Outlook Forum 2002

Held February 21-22

... Unveiled farm-sector projections for 2002 and the USDA Agricultural Baseline Projections to 2011

... Presented 2 days of information-packed sessions on agricultural prospects and related timely issues

**At the annual Outlook Forum**, a decades-old institution, crop and livestock prospects have long been a staple topic. Today's forum also explores the relationships between policy and markets, the challenges of delivering a safe food supply, and the economics of rural development. Among the offerings on this year's Forum program:

### 2002 Agricultural Prospects

Keith Collins, Chief Economist, USDA

### U.S. Trade and Agricultural Policy

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

### Impacts of China's WTO Accession

Neilson Conklin, Director, Market and Trade Economics Division, Economic Research Service, USDA

### Tracking Food Products for Quality, Safety, and Efficiency

Susan Offutt, Administrator, Economic Research Service, USDA

### Coming Soon:

Outlook Forum speeches are available on the web on March 1. Meanwhile, browse through the 2001 Forum speeches, at <http://www.usda.gov/agency/oce/waob/oc2000/pastyears.htm>

Look for Outlook Forum-based articles on 2002 prospects and the impacts of China's WTO accession in upcoming issues of ERS's *Agricultural Outlook* magazine



## USDA Agricultural Baseline Projections to 2011

### Baseline highlights

<http://www.ers.usda.gov/Briefing/baseline/summary.htm>

### Complete Baseline report

<http://www.ers.usda.gov/publications/waob021/waob20021.pdf>

### Data tables

<http://www.ers.usda.gov/db/baseline/>

## USDA Agricultural Baseline Projections to 2011

Released at the Forum, the 2002 Baseline indicates that slow U.S. and global economic growth and a strong U.S. dollar provide a weak setting for the agricultural sector in the initial years of USDA's long-term, 10-year projections.

Export competition and a strong dollar are projected to continue, but more vigorous global economic growth in the longer term, particularly in developing countries, leads to gains in trade and U.S. exports.

The projected results: rising market prices, increases in farm income, and improvement in the financial condition of the U.S. agricultural sector.

# Statistical Indicators

## Summary Data

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

	Annual			2001				2002		
	2000	2001	2002	I	II	III	IV	I	II	III
Prices received by farmers (1990-92=100)	96	102	96	100	107	107	95	--	--	--
Livestock & products	97	106	96	103	110	111	100	--	--	--
Crops	96	99	95	97	104	104	96	--	--	--
Prices paid by farmers (1990-92=100)										
Production items	118	122	119	122	122	122	120	--	--	--
Commodities and services, interest, taxes, and wage rates (PPITW)	120	123	121	124	124	123	122	--	--	--
Cash receipts (\$ bil.)	194	206	--	49	46	52	60	--	--	--
Livestock	99	109	--	27	27	28	27	--	--	--
Crops	94	97	--	22	19	24	32	--	--	--
Market basket (1982-84=100)										
Retail cost	171	177	--	175	177	178	179	--	--	--
Farm value	97	106	--	102	106	110	108	--	--	--
Spread	210	215	--	215	215	215	217	--	--	--
Farm value/retail cost (%)	20	21	--	20	21	22	21	--	--	--
Retail prices (1982-84=100)										
All food	168	174	178	172	173	174	175	177	178	179
At home	168	174	178	172	173	174	175	177	178	179
Away from home	169	174	178	172	173	175	176	177	178	179
Agricultural exports (\$ bil.) <sup>1</sup>	50.8	52.8	54.5	13.8	12.5	12.3	15.2	14.2	12.7	12.4
Agricultural imports (\$ bil.) <sup>1</sup>	38.9	39.0	40.0	9.9	10.0	9.4	10.0	9.9	9.7	10.4
Commercial production										
Red meat (mil. lb.)	46,150	45,655	45,104	11,096	11,145	11,367	12,047	11,282	11,108	11,292
Poultry (mil. lb.)	36,427	37,209	38,025	9,007	9,437	9,348	9,418	9,250	9,680	9,550
Eggs (mil. doz.)	7,034	7,144	7,270	1,750	1,778	1,788	1,828	1,800	1,790	1,815
Milk (bil. lb.)	167.7	165.4	169.3	41.3	42.7	40.6	40.8	42.1	43.7	41.7
Consumption, per capita										
Red meat and poultry (lb.)	220.2	217.2	217.0	53.1	53.4	54.5	56.2	53.6	54.0	54.0
Corn beginning stocks (mil. bu.) <sup>2</sup>	1,787.0	1,717.5	--	1,717.5	8,529.6	6,043.0	3,924.0	1,899.1	--	--
Corn use (mil. bu.) <sup>2</sup>	9,514.8	9,740.3	--	3,104.3	2,487.5	2,122.2	2,026.3	3,144.1	--	--
Prices <sup>3</sup>										
Choice steers--Neb. Direct (\$/cwt)	69.65	72.43	72-77	79.11	75.13	70.33	65.13	67-69	72-76	74-80
Barrows and gilts--IA, So. MN (\$/cwt)	44.70	45.81	43-46	42.83	52.05	51.05	37.30	41-43	48-50	44-48
Broilers--12-city (cents/lb.)	56.20	59.10	57-61	57.80	59.20	61.10	58.50	56-58	57-61	59-63
Eggs--NY gr. A large (cents/doz.)	68.90	67.20	63-67	75.80	63.30	61.40	68.20	68-70	56-60	58-62
Milk--all at plant (\$/cwt)	12.33	14.93	12.85-	13.37	15.30	16.53	14.50	13.05-	12.25-	12.50-
		0.00	13.55					13.35	12.85	13.40
Wheat--KC HRW ordinary (\$/bu.)	3.08	3.33	--	3.45	3.41	3.18	3.30	--	--	--
Corn--Chicago (\$/bu.)	1.97	2.03	--	2.03	1.96	2.10	2.01	--	--	--
Soybeans--Chicago (\$/bu.)	4.86	4.58	--	4.70	4.48	4.48	4.89	4.45	--	--
Cotton--avg. spot 41-34 (cents/lb)	57.47	39.68	--	61.24	52.66	39.86	35.58	30.62	--	--
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Farm real estate values <sup>4</sup>										
Nominal (\$ per acre)	713	740	798	844	887	926	974	1,020	1,080	1,130
Real (1996 \$)	795	806	848	879	904	926	955	988	1,031	1,057
U.S. civilian employment (mil.) <sup>5</sup>	128.1	129.2	131.1	132.3	133.9	136.3	137.7	139.4	140.9	--
Food and fiber (mil.)	23.1	23.5	24.1	24.5	24.2	24.1	24.2	24.4	24.1	--
Farm sector (mil.)	1.9	1.8	1.9	2.0	2.0	1.9	1.8	1.8	1.7	--
U.S. gross domestic product (\$ bil.)	6,318.9	6,642.3	7,054.3	7,400.5	7,813.2	8,318.4	8,781.5	9,268.6	9,872.9	--
Food and fiber--net value added (\$ bil.)	924.8	957.6	1,026.6	1,048.2	1,078.9	1,101.9	1,132.7	1,180.6	1,264.5	--
Farm sector--net value added (\$ bil.) <sup>6</sup>	75.5	70.2	77.8	73.5	85.7	82.6	74.0	66.9	82.0	--

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

## U.S. & Foreign Economic Data

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

	Annual			2000				2001			
	1998	1999	2000	II	III	IV	I	II	III	IV	
Billions of current dollars (quarterly data seasonally adjusted at annual rates)											
Gross Domestic Product	8,781.5	9,268.6	9,872.9	9,857.6	9,937.5	10,027.9	10,141.7	10,202.6	10,224.9	10,221.6	
Gross National Product	8,778.1	9,261.8	9,860.8	9,841.0	9,919.4	10,032.1	10,131.3	10,190.9	10,213.8	--	
Personal consumption expenditures	5,856.0	6,250.2	6,728.4	6,674.9	6,785.5	6,871.4	6,977.6	7,044.6	7,057.6	7,165.0	
Durable goods	693.2	760.9	819.6	813.8	825.4	818.7	838.1	844.7	840.6	908.6	
Nondurable goods	1,708.5	1,831.3	1,989.6	1,978.3	2,012.4	2,025.1	2,047.1	2,062.3	2,057.5	2,044.7	
Food	852.6	899.8	957.5	953.5	967.2	971.4	982.0	987.0	993.5	997.1	
Clothing and shoes	284.8	300.9	319.1	317.0	321.6	323.5	325.7	322.4	318.5	320.6	
Services	3,454.3	3,658.0	3,919.2	3,882.8	3,947.7	4,027.5	4,092.4	4,137.6	4,159.4	4,211.7	
Gross private domestic investment	1,538.7	1,636.7	1,767.5	1,792.4	1,788.4	1,780.3	1,722.8	1,669.9	1,624.8	1,516.0	
Fixed investment	1,465.6	1,578.2	1,718.1	1,717.0	1,735.9	1,741.6	1,748.3	1,706.5	1,682.6	1,631.5	
Change in private inventories	73.1	58.6	49.4	75.4	85.5	38.7	-25.5	-36.6	-57.8	-115.5	
Net exports of goods and services	-151.7	-250.9	-364.0	-350.8	-380.6	-390.6	-363.8	-347.4	-294.4	-333.7	
Government consumption expenditures and gross investment	1,538.5	1,632.5	1,741.0	1,741.1	1,744.2	1,766.8	1,805.2	1,835.4	1,836.9	1,874.4	
Billions of 1996 dollars (quarterly data seasonally adjusted at annual rates) <sup>1</sup>											
Gross Domestic Product	8,508.9	8,856.5	9,224.0	9,229.4	9,260.1	9,303.9	9,334.5	9,341.7	9,310.4	9,315.6	
Gross National Product	8,508.4	8,853.0	9,216.4	9,217.7	9,247.2	9,311.7	9,329.1	9,335.5	9,304.9	--	
Personal consumption expenditures	5,683.7	5,968.4	6,257.8	6,226.3	6,292.1	6,341.1	6,388.5	6,428.4	6,443.9	6,528.4	
Durable goods	726.7	817.8	895.5	886.5	904.1	899.4	922.4	938.1	940.2	1,019.8	
Nondurable goods	1,686.4	1,766.4	1,849.9	1,844.9	1,864.1	1,866.8	1,878.0	1,879.4	1,882.0	1,886.3	
Food	819.4	847.8	881.3	881.5	886.2	886.4	887.3	886.1	883.8	882.1	
Clothing and shoes	290.4	312.1	335.3	333.3	339.8	339.9	342.7	344.1	344.7	347.9	
Services	3,273.4	3,393.2	3,527.7	3,509.6	3,540.2	3,588.8	3,605.1	3,629.8	3,640.4	3,655.2	
Gross private domestic investment	1,558.0	1,660.1	1,772.9	1,801.6	1,788.8	1,778.3	1,721.0	1,666.2	1,620.5	1,514.7	
Fixed investment	1,480.0	1,595.4	1,716.2	1,719.2	1,730.1	1,732.1	1,740.3	1,696.4	1,671.6	1,622.9	
Change in private inventories	76.7	62.1	50.6	78.9	51.7	42.8	-27.1	-38.3	-61.9	-120.6	
Net exports of goods and services	-221.1	-316.9	-399.1	-392.8	-411.2	-421.1	-404.5	-406.7	-411.0	-432.6	
Government consumption expenditures and gross investment	1,483.3	1,531.8	1,572.6	1,577.2	1,570.0	1,582.8	1,603.4	1,623.0	1,624.1	1,660.2	
GDP implicit price deflator (% change)	1.2	1.4	2.3	2.2	1.9	1.8	3.3	2.1	2.2	-0.3	
Disposable personal income (\$ bil.)	6,355.6	6,618.0	7,031.0	6,993.7	7,081.3	7,189.8	7,295.0	7,363.2	7,576.4	7,438.8	
Disposable pers. income (1996 \$ bil.)	6,168.6	6,320.0	6,539.2	6,523.7	6,566.5	6,634.9	6,679.0	6,719.2	6,917.5	6,777.9	
Per capita disposable pers. income (\$)	23,031	23,708	24,889	24,801	25,029	25,331	25,634	25,798	26,457	25,895	
Per capita disp. pers. income (1996 \$)	22,354	22,641	23,148	23,134	23,209	23,376	23,470	23,541	24,157	23,594	
U.S. resident population plus Armed Forces overseas (mil.) <sup>2</sup>	270.5	272.9	275.4	275.0	275.6	276.3	--	--	--	--	
Civilian population (mil.) <sup>2</sup>	269.0	271.5	273.9	273.5	274.2	274.9	--	--	--	--	
	Annual			2000				2001			
	1998	1999	2000	Dec	Jul	Aug	Sep	Oct	Nov	Dec	
Monthly data seasonally adjusted											
Total industrial production (1992=100)	138.8	144.7	151.6	150.1	145.2	144.5	142.9	141.8	141.5	141.3	
Leading economic indicators (1996=100)	105.4	108.8	109.9	108.7	109.8	109.8	109.1	109.2	110.1	111.5	
Civilian employment (mil. persons)	131.5	133.5	135.2	135.8	135.1	134.4	135.0	134.6	134.3	134.1	
Civilian unemployment rate (%)	4.5	4.2	4.0	4.0	4.6	4.9	5.0	5.4	5.6	5.8	
Personal income (\$ bil. annual rate)	7,426.0	7,777.3	8,319.2	8,566.7	8,768.5	8,775.9	8,771.0	8,761.4	8,760.0	8,794.6	
Money stock-M2 (daily avg.) (\$ bil.) <sup>3</sup>	4,384.1	4,651.8	4,937.4	4,937.4	5,226.1	5,261.8	5,379.7	5,371.9	5,413.8	5,449.3	
Three-month Treasury bill rate (%)	4.81	4.66	5.85	5.83	3.54	3.39	2.87	2.22	1.93	1.72	
AAA corporate bond yield (Moody's) (%)	6.53	7.04	7.62	7.21	7.13	7.02	7.17	7.03	6.97	6.76	
Total housing starts (1,000) <sup>4</sup>	1,616.9	1,640.9	1,568.7	1,532	1,660	1,559	1,585	1,518	1,625	1,570	
Business inventory/sales ratio <sup>5 6</sup>	1.44	1.41	1.40	1.42	1.42	1.42	1.45	1.39	1.40	--	
Retail & food services sales (\$ bil.) <sup>6 7</sup>	2,906.7	3,149.2	3,388.82	284.3	292.2	292.9	286.4	304.7	295.9	296.4	
Food and beverage stores (\$ bil.)	421.6	441.4	465.29	39.6	40.0	40.2	40.4	40.5	40.7	40.9	
Clothing & accessory stores (\$ bil.)	149.4	159.7	168.48	14.2	14.3	14.2	13.3	14.0	14.0	14.4	
Food services & drinking places (\$ bil.)	272.6	286.3	306.07	25.9	26.9	27.0	26.4	26.7	27.0	28.3	

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

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**Table 3—World Economic Growth**

	Calendar year									
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<i>Real GDP, annual percent change</i>										
<b>World</b>	3.1	2.8	3.5	3.4	1.9	2.8	3.9	1.3	1.2	3.3
less U.S.	2.7	2.8	3.4	3.0	1.0	2.3	3.8	1.4	1.1	3.4
<b>Developed economies</b>	2.7	2.3	3.1	3.0	2.1	2.6	3.4	1.0	0.8	2.6
less U.S.	2.1	2.2	2.8	2.3	1.0	1.9	3.0	1.0	0.3	2.4
United States	4.0	2.7	3.6	4.4	4.3	4.1	4.1	1.1	1.6	3.1
Canada	4.7	2.7	1.5	4.4	3.3	4.6	4.3	1.3	1.0	3.5
Japan	0.6	1.5	5.1	1.6	-2.5	0.2	2.2	-0.4	-1.8	0.9
Australia	4.5	4.5	3.8	4.7	4.5	4.4	2.0	2.3	3.2	3.3
European Union	2.7	2.5	1.6	2.5	2.8	2.6	3.5	1.6	1.2	3.1
Transition economies	-8.1	-1.3	-0.8	1.4	-1.4	3.4	6.2	4.5	3.5	4.0
Eastern Europe	3.9	5.6	4.0	2.7	2.6	2.4	3.8	2.6	2.5	4.4
Poland	5.2	7.0	6.0	6.8	4.8	4.1	4.2	1.1	1.1	4.1
Former Soviet Union	-14.1	-5.4	-4.0	0.5	-4.4	4.2	8.1	5.8	4.1	3.7
Russia	-12.6	-4.1	-3.4	0.9	-4.9	5.0	8.3	5.0	3.8	3.6
<b>Developing economies</b>	6.3	5.3	5.8	5.3	1.2	3.4	5.7	2.3	2.9	5.8
<b>Asia</b>	8.8	8.3	7.4	5.8	0.4	6.3	7.0	3.5	4.3	6.6
East Asia	9.7	8.7	7.7	7.0	1.9	7.4	8.1	4.0	4.7	6.7
China	12.8	10.5	9.6	8.8	7.8	7.1	8.0	7.5	7.1	7.9
Taiwan	7.1	6.4	6.1	6.7	4.6	5.4	5.9	-2.4	0.8	4.2
Korea	8.2	8.9	6.8	5.0	-6.7	10.7	9.0	2.8	3.8	5.7
Southeast Asia	8.3	8.3	7.3	4.0	-7.5	3.5	5.9	1.7	2.8	6.4
Indonesia	7.5	8.2	7.8	4.7	-13.2	0.7	4.8	3.2	3.3	6.8
Malaysia	9.2	9.8	10.0	7.3	-7.4	5.8	8.4	0.4	2.3	6.6
Philippines	4.4	4.7	5.8	5.2	-0.8	3.2	4.0	3.4	3.8	4.1
Thailand	9.0	8.9	5.9	-1.7	-10.2	4.2	4.4	1.5	2.6	6.0
South Asia	6.6	7.1	6.3	4.2	6.1	6.1	4.6	4.2	4.6	6.7
India	7.3	7.7	7.0	4.6	6.8	6.5	4.8	4.5	4.8	7.0
Pakistan	3.9	5.1	3.9	1.0	2.5	4.0	3.4	2.6	3.2	5.0
<b>Latin America</b>	5.3	1.4	3.7	5.2	1.8	0.0	3.9	0.5	0.3	5.1
Mexico	4.4	-6.2	5.2	6.8	4.9	3.5	6.9	-0.3	1.4	5.6
Caribbean/Central	4.1	3.8	3.6	6.4	6.8	6.9	4.9	1.5	2.6	6.1
South America	5.6	3.1	3.3	4.8	1.0	-1.1	3.1	0.7	-0.1	4.9
Argentina	5.8	-2.8	5.5	8.1	3.9	-3.2	-0.3	-4.2	-9.1	5.3
Brazil	5.9	4.2	2.8	3.2	-0.1	0.8	3.9	1.8	1.8	4.7
Colombia	5.8	5.2	2.1	3.4	0.5	-4.3	2.2	1.5	2.5	5.9
Venezuela	-2.3	3.7	-0.5	6.5	-0.7	-6.1	3.2	4.9	2.7	3.0
<b>Middle East</b>	-0.3	4.4	4.7	4.4	2.7	-0.8	5.0	-0.7	2.4	4.6
Israel	6.9	7.0	5.1	3.2	2.6	2.2	5.9	0.5	2.1	4.8
Saudi Arabia	0.5	0.5	1.4	1.9	2.3	-1.1	3.5	3.0	2.5	2.3
Turkey	-5.5	7.2	7.0	7.5	3.1	-4.7	7.2	-6.8	2.0	7.5
<b>Africa</b>	3.2	2.9	5.2	2.8	3.1	2.6	3.8	3.4	3.1	3.7
North Africa	3.9	1.5	6.5	2.6	5.6	3.9	4.0	4.4	4.1	3.8
Egypt	3.9	4.7	5.0	5.5	5.6	6.0	5.2	3.3	4.2	4.3
Sub-Saharan	2.6	3.9	4.3	3.0	1.3	1.7	3.5	2.7	2.4	3.6
South Africa	3.2	3.1	4.2	2.5	0.6	1.2	3.4	2.1	1.8	3.5
<i>Consumer prices, annual percent change</i>										
Developed economies	3.1	2.6	2.6	2.4	2.1	1.5	1.4	2.3	2.4	1.7
Transition economies	635.8	274.2	133.8	42.5	27.3	21.8	43.9	20.0	16.4	10.7
Developing economies	49.2	55.3	23.2	15.4	9.9	10.5	6.8	6.0	5.9	5.1
Asia	10.8	16.0	13.2	8.3	4.8	7.7	2.5	1.9	2.8	3.3
Latin America	194.6	200.3	36.0	21.2	12.9	9.9	8.8	8.1	6.2	4.9
Middle East	29.4	37.3	39.1	29.6	27.7	27.6	23.2	19.2	18.9	14.5
Africa	39.0	54.7	35.3	30.2	14.2	10.8	11.5	13.6	12.6	8.0

-- = Not available.

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

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## Farm Prices

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

	Annual			2001						2002
	1999	2000	2001	Jan	Aug	Sep	Oct	Nov	Dec	Jan
<i>1990-92=100</i>										
<b>Prices received</b>										
All farm products	95	96	102	96	109	105	94	93	95	96
All crops	96	96	99	94	107	101	88	88	95	95
Food grains	91	85	91	93	90	92	90	88	91	90
Feed grains and hay	86	86	91	89	96	92	86	86	92	91
Cotton	85	82	65	86	59	64	57	49	53	48
Tobacco	102	107	107	115	104	108	109	114	113	111
Oil-bearing crops	83	85	80	84	87	81	74	77	78	77
Fruit and nuts, all	111	99	106	81	126	121	120	108	92	86
Commercial vegetables	110	123	130	122	142	132	101	101	149	171
Potatoes and dry beans	100	93	102	79	114	102	93	106	116	118
Livestock and products	95	97	106	100	111	110	104	99	96	96
Meat animals	83	94	97	97	100	96	91	86	85	89
Dairy products	110	94	114	101	126	130	120	110	103	102
Poultry and eggs	110	107	116	105	120	122	121	117	109	109
<b>Prices paid</b>										
Commodities and services, interest, taxes, and wage rates (PPITW)	115	120	123	125	123	123	123	122	122	121
Production items	111	116	120	121	120	119	118	117	117	116
Feed	100	102	108	112	111	110	109	108	108	108
Livestock and poultry	95	110	111	111	113	112	113	107	110	109
Seeds	121	124	132	125	134	134	134	134	134	134
Fertilizer	105	110	122	135	116	111	109	107	104	102
Agricultural chemicals	121	120	121	123	118	121	121	123	122	120
Fuels	93	134	118	137	117	127	103	98	77	75
Supplies and repairs	121	124	128	126	127	129	129	129	129	129
Autos and trucks	119	119	118	120	117	116	117	119	119	120
Farm machinery	135	139	142	141	143	140	141	141	141	141
Building material	120	121	121	120	121	121	121	121	121	120
Farm services	116	119	121	120	122	122	120	120	120	120
Rent	113	110	117	117	116	116	116	116	117	120
Interest payable per acre on farm real estate debt	106	112	114	114	116	116	116	116	114	109
Taxes payable per acre on farm real estate	120	123	124	124	123	123	123	123	124	126
Wage rates (seasonally adjusted)	135	140	146	150	143	143	148	148	148	148
Prod. items, interest, taxes & wage rates (PITW)	113	118	122	123	122	121	121	120	119	119
Ratio, prices received to prices paid (%)*	83	81	83	77	89	85	76	76	78	79
Prices received (1910-14=100)	605	612	649	613	693	668	598	591	605	607
Prices paid, etc. (1910-14=100)	1,531	1,594	1,643	1,658	1,642	1,642	1,635	1,627	1,618	1,615
Parity ratio (1910-14=100) (%)*	40	39	40	37	42	41	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 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>			2001						2002
	1998	1999	2000	Jan	Aug	Sep	Oct	Nov	Dec	Jan
<b>Crops</b>										
All wheat (\$/bu.)	2.65	2.48	2.65	2.84	2.73	2.85	2.86	2.88	2.89	2.94
Rice, rough (\$/cwt)	8.89	5.93	5.75	5.86	5.10	4.78	4.36	4.08	4.07	4.18
Corn (\$/bu.)	1.94	1.82	1.85	1.98	1.90	1.91	1.84	1.85	1.98	1.98
Sorghum (\$/cwt)	2.97	2.80	3.15	3.39	3.50	3.46	3.30	3.29	3.26	3.35
All hay, baled (\$/ton)	84.60	76.90	83.00	85.20	97.70	98.60	99.40	97.10	93.70	93.00
Soybeans (\$/bu.)	4.93	4.63	4.75	4.68	4.83	4.53	4.09	4.16	4.20	4.27
Cotton, upland (¢/lb.)	60.20	45.00	56.00	52.10	36.00	38.50	34.50	29.50	32.20	29.00
Potatoes (\$/cwt)	5.56	5.77	4.95	4.56	6.84	6.05	5.28	5.97	6.85	6.84
Lettuce (\$/cwt) <sup>2</sup>	16.10	13.30	17.50	13.70	26.90	26.20	11.30	11.20	28.60	32.70
Tomatoes, fresh (\$/cwt) <sup>2</sup>	35.20	25.80	31.40	43.80	28.20	20.80	28.80	28.90	25.00	49.40
Onions (\$/cwt)	13.80	9.78	11.40	13.90	14.80	13.20	10.40	9.91	9.42	9.80
Beans, dry edible (\$/cwt)	19.00	16.40	15.30	15.10	17.50	18.10	19.20	22.10	21.40	22.80
Apples for fresh use (¢/lb.)	17.30	21.30	17.90	15.80	16.90	18.70	24.20	23.30	22.40	21.70
Pears for fresh use (\$/ton)	291.00	294.00	264.00	313.00	533.00	463.00	413.00	350.00	342.00	282.00
Oranges, all uses (\$/box) <sup>3</sup>	4.29	5.54	--	2.44	5.57	6.53	5.12	3.19	3.44	3.89
Grapefruit, all uses (\$/box) <sup>3</sup>	2.00	3.27	--	2.25	3.69	6.89	5.29	3.06	2.30	1.98
<b>Livestock</b>										
Cattle, all beef (\$/cwt)	59.60	63.40	68.60	74.80	70.70	69.00	66.60	63.90	64.60	66.60
Calves (\$/cwt)	78.80	87.70	104.00	108.00	106.00	106.00	99.20	96.40	100.00	100.00
Hogs, all (\$/cwt)	34.40	30.30	42.30	37.20	50.60	45.10	40.50	35.00	33.30	36.50
Lambs (\$/cwt)	72.30	74.50	79.40	74.10	55.40	53.40	52.90	54.10	61.70	--
All milk, sold to plants (\$/cwt)	15.46	14.38	12.40	13.20	16.40	17.00	15.70	14.40	13.40	13.30
Milk, manuf. grade (\$/cwt)	14.24	12.84	10.54	10.90	15.40	16.20	14.80	12.40	12.50	12.50
Broilers, live (¢/lb.)	39.30	37.10	33.60	34.00	42.00	43.00	41.00	39.00	37.00	37.00
Eggs, all (¢/doz.) <sup>4</sup>	66.80	62.20	61.80	67.20	57.60	56.70	62.60	65.80	59.00	62.30
Turkeys (¢/lb.)	38.00	40.80	40.70	36.60	38.80	40.40	44.00	44.30	38.50	34.10

-- = Not available.

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

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



## Producer & Consumer Prices

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

	Annual			2001						2002
	1999	2000	2001	Jan	Aug	Sep	Oct	Nov	Dec	Jan
<i>1982-84=100</i>										
Consumer Price Index, all items	166.6	172.1	177.1	175.1	177.5	178.3	177.7	177.4	176.7	177.1
CPI, all items less food	167.0	172.9	177.8	175.9	178.2	179.0	178.2	177.8	177.0	177.4
All food	164.1	167.8	173.1	170.9	173.9	174.1	174.9	174.6	174.7	175.8
Food away from home	165.1	169.0	173.9	171.4	174.7	175.1	175.6	175.8	176.0	176.4
Food at home	164.2	167.9	173.4	171.3	174.2	174.3	175.2	174.7	174.7	176.2
Meats <sup>1</sup>	142.3	150.7	159.3	154.1	160.7	161.5	161.8	161.2	160.0	160.0
Beef and veal	139.2	148.1	160.5	154.8	161.0	161.1	161.0	161.0	160.2	159.7
Pork	145.9	156.5	162.4	156.7	166.3	167.8	167.2	164.7	163.0	163.7
Poultry	157.9	159.8	164.9	160.8	167.5	165.4	169.6	166.4	167.7	166.8
Fish and seafood	185.3	190.4	191.1	192.8	189.7	189.1	189.5	189.2	189.4	189.2
Eggs	128.1	131.9	136.4	150.4	133.0	131.4	132.3	138.4	133.5	138.4
Dairy and related products <sup>2</sup>	159.6	160.7	167.1	163.6	168.9	169.4	170.8	171.2	170.8	169.9
Fats and oils <sup>3</sup>	148.3	147.4	155.7	153.0	158.5	158.5	159.5	155.6	156.9	158.3
Fresh fruits	266.3	258.3	265.1	261.8	258.9	266.0	268.7	268.6	270.7	276.4
Fresh vegetables	209.3	219.4	230.6	235.9	224.9	228.2	229.1	228.6	230.4	251.6
Potatoes	193.1	196.3	202.3	186.6	224.5	218.3	216.3	203.4	205.2	213.4
Cereals and bakery products	185.0	188.3	193.8	191.1	195.9	195.1	195.2	194.9	195.3	196.7
Sugar and sweets	152.3	154.0	155.7	155.7	156.1	156.6	156.4	154.9	156.1	158.4
Nonalcoholic beverages <sup>4</sup>	134.3	137.8	139.2	139.4	140.0	139.2	139.9	139.5	138.5	139.5
Apparel										
Footwear	125.7	123.8	123.0	121.4	121.9	122.9	124.9	123.7	120.6	117.1
Tobacco and smoking products	355.8	394.9	425.2	404.3	424.6	444.0	429.9	446.7	431.7	432.8
Alcoholic beverages	169.7	174.7	179.3	177.2	180.0	180.4	180.8	181.2	180.9	181.8

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

4. Includes fruit juices as of January 1998.

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

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

	Annual			2001						2002
	1998	1999	2000	Jan	Aug	Sep	Oct	Nov	Dec	Jan
	1982=100									
All commodities	124.4	125.5	132.7	140.0	133.4	133.3	130.2	130.1	128.0	128.5
Finished goods <sup>1</sup>	130.6	133.0	138.0	141.2	140.9	141.6	139.6	138.4	137.2	137.5
All foods <sup>2</sup>	132.4	132.2	133.0	134.3	139.0	139.2	137.8	136.2	136.1	136.7
Consumer foods	134.3	135.1	137.2	138.6	142.6	142.9	141.8	140.5	140.4	141.1
Fresh fruits and melons	90.0	103.6	91.4	98.1	87.4	96.6	100.3	101.7	115.3	107.0
Fresh and dry vegetables	139.5	118.0	126.7	128.8	122.2	125.1	110.8	107.2	120.5	144.8
Dried and dehydrated fruits	124.4	121.2	122.9	121.2	118.5	118.5	118.5	119.0	120.3	120.1
Canned fruits and juices	134.4	137.8	140.0	142.6	144.2	144.3	143.7	143.3	143.4	143.3
Frozen fruits, juices and ades	116.1	123.0	120.9	115.8	111.7	111.7	112.0	113.0	117.8	117.5
Fresh vegetables except potatoes	137.9	117.7	135.0	147.0	127.2	132.3	112.3	105.9	121.0	146.1
Canned vegetables and juices	121.5	120.9	121.2	121.4	124.9	125.3	126.1	128.2	127.8	128.2
Frozen vegetables	125.4	126.1	126.0	127.6	128.8	128.8	129.5	128.8	128.8	129.8
Potatoes	122.5	126.9	100.5	88.5	171.7	151.3	140.1	141.2	149.4	180.1
Eggs for fresh use (1991=100)	90.1	77.9	84.9	95.7	75.9	71.7	77.0	86.6	79.2	89.4
Bakery products	175.8	178.0	182.3	184.9	188.8	188.4	189.3	189.2	188.7	188.9
Meats	101.4	104.6	114.3	115.8	123.6	120.8	118.2	113.5	114.9	112.9
Beef and veal	99.5	106.3	113.7	122.1	119.4	117.7	116.2	111.0	113.3	111.7
Pork	96.6	96.0	113.4	105.7	132.1	125.7	119.5	113.7	114.3	111.9
Processed poultry	120.7	114.0	112.9	110.0	118.8	121.4	121.3	120.5	116.3	116.4
Unprocessed and packaged fish	183.0	190.9	198.1	193.7	185.5	192.8	182.9	183.2	176.8	183.1
Dairy products	138.1	139.2	133.7	137.0	152.1	153.5	150.6	145.4	140.3	140.9
Processed fruits and vegetables	125.8	128.1	128.6	128.4	129.9	130.1	130.1	130.8	131.4	131.7
Shortening and cooking oil	143.4	140.4	132.4	129.5	142.2	136.1	134.4	132.2	133.2	133.3
Soft drinks	134.8	137.9	144.1	147.0	147.9	148.3	148.6	148.6	148.1	149.3
Finished consumer goods less foods	126.4	130.5	138.4	143.3	141.3	142.4	139.0	137.3	135.1	135.5
Alcoholic beverages	135.2	136.7	140.6	144.5	145.5	145.2	145.9	146.2	146.5	146.1
Apparel	126.6	127.1	127.4	127.3	126.9	126.7	126.2	126.3	126.0	125.8
Footwear	144.7	144.5	144.9	145.1	145.6	145.7	145.7	145.7	145.7	146.0
Tobacco products	283.4	374.0	397.2	426.7	447.4	447.4	447.6	455.5	455.5	447.9
Intermediate materials <sup>3</sup>	123.0	123.2	129.2	131.7	129.7	130.1	127.6	126.7	125.4	125.6
Materials for food manufacturing	123.1	120.8	119.2	120.3	128.1	127.2	126.1	123.9	122.5	122.6
Flour	109.2	104.3	103.8	107.2	109.4	110.0	111.0	111.3	109.7	113.5
Refined sugar <sup>4</sup>	119.8	121.0	110.6	106.8	110.7	110.5	111.3	110.4	113.6	115.9
Crude vegetable oils	131.1	90.2	73.6	60.9	82.5	76.2	70.8	73.8	73.8	75.2
Crude materials <sup>5</sup>	96.7	98.2	120.6	164.7	113.0	107.6	97.7	104.8	94.8	98.1
Foodstuffs and feedstuffs	103.8	98.7	100.2	104.8	109.1	108.7	104.7	98.3	96.4	99.5
Fruits and vegetables and nuts <sup>6</sup>	117.2	117.4	111.1	116.4	107.6	114.1	110.6	109.3	122.1	127.7
Grains	93.4	80.1	78.3	85.7	83.1	81.7	78.5	80.2	82.6	82.2
Slaughter livestock	82.3	86.4	96.5	100.9	100.1	97.6	93.5	84.3	84.0	89.7
Slaughter poultry, live	141.4	129.9	124.7	124.3	132.6	139.5	137.2	134.5	121.4	124.7
Plant and animal fibers	110.4	86.5	93.9	92.8	59.4	56.6	48.3	54.2	54.8	54.9
Fluid milk	112.6	106.3	92.0	98.1	123.4	126.8	121.2	106.6	101.6	99.5
Oilseeds	114.4	90.8	93.8	93.6	98.6	91.4	86.7	86.4	85.2	86.3
Leaf tobacco	104.6	101.6	--	119.9	106.7	110.8	112.0	116.4	115.2	113.8
Raw cane sugar	117.2	113.7	101.8	110.5	111.0	110.5	110.6	111.0	112.8	111.7

-- = Not available. 1. Commodities ready for sale to ultimate consumer. 2. Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). 3. Commodities requiring further processing to become finished goods. 4. All types and sizes of refined sugar. 5. Products entering market for the first time that have not been manufactured at that point. 6. Fresh and dried. This table is compiled with data provided by the Bureau of Labor Statistics (BLS). BLS operates a website at <http://www.bls.gov> and a Producer Prices Information Hotline at (202) 691-7705.

## Farm-Retail Price Spreads

Table 8—Farm-Retail Price Spreads

	Annual			2000		2001				
	1999	2000	2001	Dec	Jul	Aug	Sep	Oct	Nov	Dec
<b>Market basket<sup>1</sup></b>										
Retail cost (1982-84=100)	167.3	170.6	177.2	174.0	177.7	177.9	178.3	179.3	178.9	178.9
Farm value (1982-84=100)	98.3	96.9	106.2	101.2	107.9	110.3	110.6	109.6	108.2	105.6
Farm-retail spread (1982-84=100)	204.5	210.3	215.4	213.2	215.3	214.3	214.8	216.8	217.0	218.5
Farm value-retail cost (%)	20.6	19.9	21.0	20.4	21.3	21.7	21.7	21.4	21.2	20.7
<b>Meat products</b>										
Retail cost (1982-84=100)	142.3	150.4	159.3	152.9	160.8	160.7	161.5	161.8	161.2	160.0
Farm value (1982-84=100)	81.6	88.4	97.4	90.7	99.4	99.5	100.2	100.6	100.5	100.9
Farm-retail spread (1982-84=100)	204.7	214.0	222.8	216.7	223.8	223.5	224.4	224.6	223.5	220.6
Farm value-retail cost (%)	29.0	29.8	31.0	30.1	31.3	31.4	31.4	31.5	31.6	31.9
<b>Dairy products</b>										
Retail cost (1982-84=100)	159.6	160.7	167.1	161.5	168.3	168.9	169.4	170.8	171.2	170.8
Farm value (1982-84=100)	107.9	98.8	118.5	106.1	126.4	129.1	133.8	123.2	116.8	105.9
Farm-retail spread (1982-84=100)	207.2	217.7	211.8	212.6	206.9	205.6	202.3	214.7	221.4	230.7
Farm value-retail cost (%)	32.4	29.5	34.0	31.5	36.0	36.7	37.9	34.6	32.7	29.7
<b>Poultry</b>										
Retail cost (1982-84=100)	157.9	159.8	164.9	160.7	166.6	167.5	165.4	169.6	166.4	167.7
Farm value (1982-84=100)	119.0	117.4	126.2	114.5	132.5	132.6	136.1	132.4	127.1	118.9
Farm-retail spread (1982-84=100)	202.7	208.7	209.3	213.9	205.8	207.6	199.1	212.4	211.6	223.9
Farm value-retail cost (%)	40.3	39.3	41.0	38.1	42.6	42.4	44.0	41.8	40.9	38.0
<b>Eggs</b>										
Retail cost (1982-84=100)	128.1	131.9	136.4	145.5	129.6	133.0	131.4	132.3	138.4	133.5
Farm value (1982-84=100)	74.9	80.6	74.3	119.3	60.2	66.0	64.6	76.6	83.4	70.5
Farm-retail spread (1982-84=100)	223.7	223.9	248.0	192.6	254.4	253.4	251.4	232.3	237.3	246.8
Farm value-retail cost (%)	37.6	39.3	35.0	52.7	29.8	31.9	31.6	37.2	38.7	33.9
<b>Cereal and bakery products</b>										
Retail cost (1982-84=100)	185.0	188.3	193.8	190.7	194.9	195.9	195.1	195.2	194.9	195.3
Farm value (1982-84=100)	82.5	75.2	78.8	77.4	78.1	79.1	79.2	77.9	77.3	76.6
Farm-retail spread (1982-84=100)	199.2	204.0	209.9	206.5	211.2	212.2	211.3	211.6	211.3	211.9
Farm value-retail cost (%)	5.5	4.9	5.0	5.0	4.9	4.9	5.0	4.9	4.9	4.8
<b>Fresh fruit</b>										
Retail cost (1982-84=100)	294.3	284.3	291.7	297.4	289.2	283.7	293.0	296.3	296.4	298.7
Farm value (1982-84=100)	153.7	141.3	145.7	143.7	127.2	142.5	136.3	173.1	168.7	170.8
Farm-retail spread (1982-84=100)	359.3	350.3	359.1	368.4	364.0	348.9	365.3	353.2	355.4	357.7
Farm value-retail cost (%)	16.5	15.7	15.8	15.3	13.9	15.9	14.7	18.5	18.0	18.1
<b>Fresh vegetables</b>										
Retail cost (1982-84=100)	209.3	219.4	230.6	240.2	226.3	224.9	228.2	229.1	228.6	230.4
Farm value (1982-84=100)	118.1	121.4	129.9	129.2	133.1	144.0	124.9	108.9	111.7	119.1
Farm-retail spread (1982-84=100)	256.2	269.8	282.4	297.3	274.2	266.5	281.3	290.9	288.7	287.6
Farm value-retail cost (%)	19.2	18.8	19.1	18.3	20.0	21.7	18.6	16.1	16.6	17.6
<b>Processed fruits and vegetables</b>										
Retail cost (1982-84=100)	154.8	153.6	159.3	153.8	160.6	161.1	160.8	161.6	160.5	161.1
Farm value (1982-84=100)	113.5	106.4	107.9	105.6	107.0	107.7	110.0	110.6	111.4	112.2
Farm-retail spread (1982-84=100)	167.7	168.3	175.3	168.8	177.3	177.8	176.6	177.5	175.8	176.4
Farm value-retail cost (%)	17.4	16.5	16.1	16.3	15.8	15.9	16.3	16.3	16.5	16.6
<b>Fats and oils</b>										
Retail cost (1982-84=100)	148.3	147.4	155.7	150.2	157.8	158.5	158.5	159.5	155.6	156.9
Farm value (1982-84=100)	89.0	80.9	76.9	73.8	86.7	88.9	78.3	74.6	78.6	80.3
Farm-retail spread (1982-84=100)	170.0	171.9	184.7	178.3	184.0	184.1	188.0	190.7	183.9	185.1
Farm value-retail cost (%)	16.2	14.8	13.3	13.2	14.8	15.1	13.3	12.6	13.6	13.8

See footnotes at end of table, next page.



**Table 8—Farm-Retail Price Spreads (continued)**

	Annual			2001						2002
	1999	2000	2001	Jan	Aug	Sep	Oct	Nov	Dec	Jan
<b>Beef, all fresh retail value (cents/lb.)</b>	260.5	275.3	300.5	291.1	301.7	301.2	303.1	303.5	302.6	304.0
<b>Beef, Choice</b>										
Retail value (cents/lb.) <sup>2</sup>	287.8	306.4	337.7	321.4	339.3	337.6	338.0	337.6	330.3	330.8
Wholesale value (cents/lb.) <sup>3</sup>	171.6	182.3	192.1	202.5	188.1	186.6	180.4	174.3	177.3	175.2
Net farm value (cents/lb.) <sup>4</sup>	141.1	149.0	154.3	167.7	148.8	147.2	141.8	136.3	137.3	147.2
Farm-retail spread (cents/lb.)	146.7	157.4	183.4	153.7	190.5	190.4	196.2	201.3	193.0	183.6
Wholesale-retail (cents/lb.) <sup>5</sup>	116.2	124.1	145.6	118.9	151.2	151.0	157.6	163.3	153.0	155.6
Farm-wholesale (cents/lb.) <sup>6</sup>	30.5	33.3	37.8	34.8	39.3	39.4	38.6	38.0	40.0	28.0
Farm value-retail value (%)	49.0	48.6	45.7	52.2	43.9	43.6	42.0	40.4	41.6	44.5
<b>Pork</b>										
Retail value (cents/lb.) <sup>2</sup>	241.5	258.2	269.4	260.6	276.3	278.1	276.4	271.3	271.4	270.8
Wholesale value (cents/lb.) <sup>3</sup>	99.0	114.5	117.8	107.9	129.2	123.9	113.5	105.7	105.5	108.4
Net farm value (cents/lb.) <sup>4</sup>	60.4	79.4	81.2	68.6	92.6	82.7	73.1	62.9	62.4	71.5
Farm-retail spread (cents/lb.)	181.1	178.8	188.2	192.0	183.7	195.4	203.3	208.4	209.0	199.3
Wholesale-retail (cents/lb.) <sup>5</sup>	142.5	143.7	151.6	152.7	147.1	154.2	162.9	165.6	165.9	162.4
Farm-wholesale (cents/lb.) <sup>6</sup>	38.6	35.1	36.6	39.3	36.6	41.2	40.4	42.8	43.1	36.9
Farm value-retail value (%)	25.0	30.8	30.1	26.3	33.5	29.7	26.4	23.2	23.0	26.4

1. Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by the Bureau of Labor Statistics (BLS).

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

**Table 9—Price Indexes of Food Marketing Costs**

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

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

## Livestock & Products

Table 10—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion <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
<b>Beef</b>										
1998	465	25,760	2,643	28,868	2,171	393	26,305	68	0.700	61.48
1999	393	26,493	2,873	29,759	2,410	411	26,938	69	0.700	65.56
2000	411	26,888	3,031	30,330	2,468	525	27,337	69	0.700	69.65
2001	525	26,208	3,202	29,935	2,236	605	27,094	68	0.700	72.43
2002	605	25,656	3,245	29,506	2,190	425	26,891	67	0.700	74.25
<b>Pork</b>										
1998	408	19,011	705	20,124	1,230	584	18,309	53	0.776	34.72
1999	584	19,308	827	20,720	1,278	489	18,953	54	0.776	34.00
2000	489	18,952	967	20,408	1,287	477	18,644	52	0.776	44.70
2001	477	19,165	962	20,604	1,580	525	18,499	52	0.776	45.81
2002	525	19,195	960	20,680	1,485	525	18,670	52	0.776	44.25
<b>Veal<sup>6</sup></b>										
1998	8	262	0	270	0	5	265	1	0.83	82.29
1999	5	235	0	240	0	5	235	1	0.83	89.62
2000	5	225	0	230	0	5	225	1	0.83	105.67
2001	5	205	0	210	0	6	204	1	0.83	106.22
2002	6	200	0	206	0	5	201	1	0.83	103.64
<b>Lamb and mutton</b>										
1998	14	251	112	377	6	12	360	1	0.89	74.20
1999	12	248	112	372	5	9	358	1	0.89	75.97
2000	9	234	130	373	6	13	354	1	0.89	79.40
2001	13	226	145	384	6	12	366	1	0.89	72.04
2002	12	202	155	369	4	13	352	1	0.89	74.50
<b>Total red meat</b>										
1998	894	45,284	3,461	49,639	3,407	994	45,239	123	--	--
1999	994	46,284	3,812	51,091	3,693	914	46,484	125	--	--
2000	914	46,299	4,128	51,341	3,761	1,020	46,560	124	--	--
2001	1,020	45,804	4,309	51,133	3,822	1,148	46,163	122	--	--
2002	1,148	45,253	4,360	50,761	3,679	968	46,114	121	--	--
<b>Broilers</b>										
1998	607	27,612	5	28,225	4,673	711	22,841	73	0.859	63
1999	711	29,468	4	30,183	4,919	796	24,469	77	0.859	58
2000	796	30,209	6	31,011	5,392	798	24,821	77	0.859	56
2001	798	30,816	11	31,625	6,177	710	24,737	76	0.859	59
2002	710	31,583	8	32,301	6,350	700	25,251	77	0.859	59
<b>Mature chickens</b>										
1998	7	525	0	533	426	6	101	1	1.0	--
1999	6	554	0	562	393	8	162	1	1.0	--
2000	8	531	0	540	220	9	311	1	1.0	--
2001	9	514	0	526	180	7	338	1	1.0	--
2002	7	500	0	508	180	8	320	1	1.0	--
<b>Turkeys</b>										
1998	415	5,215	0	5,630	446	304	4,880	18	1.0	62
1999	304	5,230	1	5,535	378	254	4,902	18	1.0	69
2000	254	5,333	1	5,589	445	241	4,902	18	1.0	71
2001	241	5,480	1	5,722	494	252	4,975	18	1.0	66
2002	252	5,527	1	5,780	495	275	5,009	18	1.0	66
<b>Total poultry</b>										
1998	1,029	33,352	6	34,388	5,545	1,022	27,821	91	--	--
1999	1,022	35,252	7	36,281	5,690	1,058	29,533	96	--	--
2000	1,058	36,073	9	37,140	6,058	1,048	30,034	96	--	--
2001	1,048	36,810	15	37,873	6,852	969	30,051	96	--	--
2002	969	37,610	11	38,589	7,025	983	30,580	96	--	--
<b>Red meat and poultry</b>										
1998	1,923	78,637	3,467	84,027	8,951	2,016	73,060	214	--	--
1999	2,016	81,537	3,819	87,371	9,383	1,972	76,017	220	--	--
2000	1,972	82,372	4,137	88,480	9,818	2,068	76,594	220	--	--
2001	2,068	82,614	4,324	89,006	10,674	2,117	76,214	217	--	--
2002	2,117	82,863	4,371	89,350	10,704	1,951	76,694	217	--	--

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

**Table 11—U.S. Egg Supply & Use**

	Beg. stocks	Production	Imports	Total supply	Exports	Hatching use	Ending stocks	Consumption		Primary market price*
								Total	Per capita	
									No.	
Million doz.									¢/doz.	
1995	14.9	6,215.6	4.1	6,234.6	208.9	847.2	11.2	5,167.3	235.6	72.9
1996	11.2	6,350.7	5.4	6,367.3	253.1	863.8	8.5	5,241.8	236.8	88.2
1997	8.5	6,473.1	6.9	6,488.5	227.8	894.7	7.4	5,358.6	240.1	81.2
1998	7.4	6,657.9	5.8	6,671.2	218.8	921.8	8.4	5,522.2	244.9	75.8
1999	8.4	6,912.0	7.4	6,927.8	161.9	941.7	7.6	5,816.6	255.7	65.6
2000	7.6	7,033.5	8.4	7,049.5	171.1	940.2	11.4	5,926.8	258.2	68.9
2001	11.4	7,144.0	9.1	7,164.4	191.0	952.2	5.7	6,015.6	259.7	67.2
2002	5.7	7,270.0	8.0	7,283.7	165.0	985.0	12.0	6,121.7	262.1	65.0

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

Information contact: LaVerne Williams (202) 694-5190

**Table 12—U.S. Milk Supply & Use**

	Production	Farm use	Commercial		Imports	Total commercial supply	CCC net removals	Commercial			CCC net removals	
			Farm market-ings	Beg. stocks				Ending stocks	Disap-pearance	All milk price <sup>1</sup>	Skim solids basis	Total solids basis <sup>2</sup>
Million lbs. (milkfat basis)										Billion lbs.		
1994	153.6	1.7	151.9	4.5	2.9	159.3	4.8	4.3	150.3	12.97	3.7	4.2
1995	155.3	1.6	153.7	4.3	2.9	160.9	2.1	4.1	154.9	12.74	4.4	3.5
1996	154.0	1.5	153.5	4.1	2.9	159.5	0.1	4.7	154.7	14.74	0.7	0.5
1997	156.1	1.4	154.7	4.7	2.7	162.1	1.1	4.9	156.1	13.34	3.7	2.7
1998	157.4	1.4	156.1	4.9	4.6	165.5	0.4	5.3	159.9	15.42	4.0	2.6
1999	162.7	1.4	161.3	5.3	4.7	171.4	0.3	6.1	164.9	14.36	6.5	4.0
2000	167.7	1.3	166.3	6.1	4.4	176.9	0.8	6.9	169.2	12.40	8.6	5.5
2001	165.4	1.3	164.1	6.8	5.8	176.7	0.1	6.9	169.6	14.93	5.8	3.6
2002	169.3	1.2	168.1	6.9	4.8	179.8	0.1	6.4	173.3	13.20	3.8	2.3

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

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

**Table 13—Poultry & Eggs**

	Annual			2000	2001					
	1998	1999	2000	Dec	Jul	Aug	Sep	Oct	Nov	Dec
<b>Broilers</b>										
Federally inspected slaughter certified (mil. lb.)	27,862.7	29,741.4	30,495.2	2,357.7	2,575.7	2,827.7	2,427.9	2,897.2	2,501.2	2,439.6
Wholesale price, 12-city (cents/lb.)	63.0	58.1	56.2	57.2	60.4	60.9	61.9	60.2	58.9	56.0
Price of grower feed (\$/ton) <sup>1</sup>	128.6	103.1	104.7	107.7	106.3	107.7	102.4	95.3	96.3	100.0
Broiler-feed price ratio <sup>2</sup>	6.3	7.2	6.6	7.4	7.9	7.8	8.4	8.6	8.1	7.4
Stocks beginning of period (mil. lb.)	606.8	711.1	795.6	750.1	681.3	633.7	615.5	616.7	627.9	678.0
Broiler-type chicks hatched (mil.)	8,491.9	8,715.4	8,792.1	738.7	760.2	761.2	730.0	739.7	695.7	769.4
<b>Turkeys</b>										
Federally inspected slaughter certified (mil. lb.)	5,280.6	5,296.5	5,402.2	403.4	471.9	493.1	423.4	541.3	493.0	418.4
Wholesale price, Eastern U.S. 8-16 lb. young hens (cents/lb.)	62.2	69.0	70.5	70.3	66.1	66.4	68.8	72.9	73.5	67.7
Price of turkey grower feed (\$/ton) <sup>1</sup>	115.6	95.0	95.9	92.2	97.7	99.5	97.3	91.7	92.3	95.1
Turkey-feed price ratio <sup>2</sup>	6.7	8.6	8.7	8.1	7.9	7.8	8.3	9.6	9.6	8.1
Stocks beginning of period (mil. lb.)	415.1	304.3	254.3	261.1	506.7	534.2	545.3	542.0	497.6	259.7
Poults placed in U.S. (mil.)	297.8	296.1	297.3	23.3	27.1	25.0	22.4	24.4	24.2	24.9
<b>Eggs</b>										
Farm production (mil.)	79,927.0	82,944.0	84,393.0	7,287.0	7,195.0	7,204.0	7,062.0	7,340.0	7,190.0	7,404.0
Average number of layers (mil.)	313.0	322.9	328.3	332.3	332.2	332.8	335.0	337.1	337.9	338.5
Rate of lay (eggs per layer on farms)	255.3	256.8	257.1	21.9	21.7	21.6	21.1	21.8	21.3	21.9
Cartoned price, New York, grade A large (cents/doz.) <sup>3</sup>	75.8	65.6	68.9	94.9	59.8	62.8	61.5	66.1	71.3	67.1
Price of laying feed (\$/ton) <sup>1</sup>	137.7	124.5	123.9	111.1	141.3	137.1	133.4	117.0	114.4	126.9
Egg-feed price ratio <sup>2</sup>	9.8	9.8	10.6	15.0	7.8	8.4	8.5	10.7	11.5	9.3
Stocks, first of month										
Frozen (mil. doz.)	7.4	8.4	7.6	11.7	10.9	12.6	13.5	13.2	12.4	5.6
Replacement chicks hatched (mil.)	438.3	451.7	429.7	34.7	37.9	35.2	36.6	36.5	31.6	31.5

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			2000		2001				
	1998	1999	2000	Dec	Jul	Aug	Sep	Oct	Nov	Dec
Class III (BFP before 2000) 3.5% fat (\$/cwt.)	14.20	12.43	9.74	9.37	15.46	15.55	15.90	14.60	11.31	11.80
Wholesale prices										
Butter, Central States (cents/lb.) <sup>1</sup>	177.6	125.2	118.5	150.0	192.4	204.5	219.7	151.9	135.2	130.2
Am. cheese, Wis. assembly pt. (cents/lb.)	158.1	142.3	116.2	113.0	168.4	171.8	173.9	139.7	126.4	129.1
Nonfat dry milk (cents/lb.) <sup>2</sup>	106.9	103.5	101.6	104.3	100.3	99.0	99.3	98.8	96.1	95.8
USDA net removals										
Total (mil. lb.) <sup>3</sup>	365.6	343.5	841.4	49.0	15.6	11.1	3.7	-12.3	19.6	17.3
Butter (mil. lb.)	6.3	3.7	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Am. cheese (mil. lb.)	8.2	4.6	28.0	4.2	0.8	0.8	0.2	-1.7	0.8	0.8
Nonfat dry milk (mil. lb.)	326.4	540.6	692.6	44.8	39.2	14.9	7.5	16.4	53.6	43.3
Milk										
Milk prod. 20 states (mil. lb.)	134,900	140,062	144,535	11,868	12,025	11,754	11,376	11,756	11,492	12,008
Milk per cow (lb.)	17,502	18,109	18,533	1,521	1,552	1,520	1,472	1,522	1,485	1,549
Number of milk cows (1,000)	7,708	7,734	7,799	7,802	7,746	7,735	7,730	7,726	7,739	7,750
U.S. milk production (mil. lb.) <sup>4</sup>	157,348	162,716	167,559	13,752	13,882	13,564	13,124	13,616	13,305	13,897
Stocks, beginning <sup>3</sup>										
Total (mil. lb.)	4,907	5,301	6,186	6,996	10,172	10,238	9,246	8,893	8,277	7,009
Commercial (mil. lb.)	4,889	5,274	6,142	6,862	9,907	9,968	8,967	8,646	8,058	6,803
Government (mil. lb.)	18	28	44	134	265	270	279	247	219	206
Imports, total (mil. lb.) <sup>3</sup>	4,588	4,772	4,445	352	604	598	319	524	512	--
Commercial disappearance (mil. lb.) <sup>3</sup>	159,779	164,947	169,123	13,935	14,301	15,044	13,655	14,632	14,947	--
Butter										
Production (mil. lb.)	1,168.0	1,277.1	1,273.6	111.6	79.9	76.8	88.7	111.0	101.3	122.6
Stocks, beginning (mil. lb.)	20.5	25.9	24.9	27.1	147.0	144.7	112.2	105.5	95.4	53.6
Commercial disappearance (mil. lb.)	1,222.5	1,310.7	1,297.6	115.4	94.7	121.7	97.0	125.0	146.2	--
American cheese										
Production (mil. lb.)	3,314.7	3,532.6	3,633.9	303.4	298.4	285.9	282.5	296.4	284.7	312.8
Stocks, beginning (mil. lb.)	410.3	407.6	458.0	521.8	528.0	534.3	505.0	486.3	462.5	437.3
Commercial disappearance (mil. lb.)	3,338.6	3,542.2	3,588.1	303.1	295.2	320.6	304.4	333.9	317.3	--
Other cheese										
Production (mil. lb.)	4,177.5	4,361.5	4,620.6	385.0	380.7	377.5	362.0	386.6	399.6	386.7
Stocks, beginning (mil. lb.)	70.0	109.5	163.3	173.4	217.6	224.6	222.1	221.2	208.9	196.3
Commercial disappearance (mil. lb.)	4,452.0	4,672.1	4,963.3	408.8	409.3	410.7	389.4	435.6	456.0	--
Nonfat dry milk										
Production (mil. lb.)	1,135.4	1,359.7	1,451.6	121.4	117.2	95.7	94.8	102.8	121.3	144.3
Stocks, beginning (mil. lb.)	103.3	56.9	150.9	133.3	165.9	147.0	108.9	102.9	100.4	112.7
Commercial disappearance (mil. lb.)	866.9	737.2	770.4	64.5	97.4	119.2	93.3	89.0	55.8	--
Frozen dessert										
Production (mil. gal.) <sup>5</sup>	1,324.3	1,301.0	1,312.2	78.9	127.9	124.8	106.2	100.7	88.9	83.9
	Annual			2000		2001				
	1998	1999	2000	II	III	IV	I	II	III	IV
Milk production (mil. lb.)	157,348	162,716	167,559	43,185	41,108	40,644	41,267	42,681	40,570	40,818
Milk per cow (lb.)	17,189	17,772	18,201	4,688	4,458	4,416	4,514	4,683	4,459	4,483
No. of milk cows (1,000)	9,154	9,156	9,206	9,212	9,221	9,203	9,143	9,114	9,098	9,105
Milk-feed price ratio	1.97	2.03	1.75	1.67	1.84	1.81	--	--	--	--
Returns over concentrate costs (\$/cwt milk)	12.15	11.40	9.40	9.05	9.85	9.80	--	--	--	--

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

**Table 15—Wool**

	Annual			2000		2001				
	1998	1999	2000	II	III	IV	I	II	III	IV
U.S. wool price (¢/lb.) <sup>1</sup>	162	110	107	120	117	96	101	130	125	126
Imported wool price (¢/lb.) <sup>2</sup>	164	136	137	139	139	136	151	155	167	168
U.S. mill consumption, scoured										
Apparel wool (1,000 lb.)	98,373	65,468	60,294	16,064	14,620	13,914	16,590	13,009	11,197	--
Carpet wool (1,000 lb.)	16,331	15,017	14,514	3,668	3,766	3,886	4,278	3,791	2,904	--

-- = 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			2001							2002
	1999	2000	2001	Jan	Aug	Sep	Oct	Nov	Dec	Jan	
Cattle on feed (7 states, 1000+ head capacity)											
Number on feed (1,000 head) <sup>1</sup>	9,021	9,752	10,076	10,076	9,387	9,383	9,613	10,231	10,203	9,910	
Placed on feed (1,000 head)	21,446	21,875	21,145	1,965	1,906	1,811	2,315	1,581	1,330	1,902	
Marketings (1,000 head)	20,124	20,674	19,955	1,751	1,854	1,541	1,640	1,541	1,545	1,792	
Other disappearance (1,000 head)	676	702	774	68	46	40	57	68	78	74	
Market prices (\$/cwt)											
Slaughter cattle											
Choice steers, 1,100-1,300 lb.											
Texas	65.89	69.86	71.98	78.79	69.07	68.75	66.30	63.60	63.62	64.00	
Neb. direct	65.56	69.65	72.43	78.49	70.16	69.16	66.58	64.71	64.00	67.55	
Boning utility cows, Sioux Falls	38.40	41.71	44.49	41.75	48.00	44.13	43.25	37.50	38.38	39.00	
Feeder steers											
Medium no. 1, Oklahoma City											
600-650 lb.	82.64	94.31	95.29	92.96	95.27	97.14	87.99	86.40	89.30	87.46	
750-800 lb.	76.39	86.14	88.20	87.23	90.44	91.64	88.03	83.63	84.44	81.65	
Slaughter hogs											
Barrows and gilts, 51-52 percent lean											
National Base converted to live equal.	34.00	44.70	45.81	38.61	52.47	46.93	41.27	35.49	35.14	38.32	
Sows, Iowa, S.MN 1-2 300-400 lb.	19.26	29.79	33.98	27.68	40.75	33.12	31.60	25.01	25.28	27.79	
Slaughter sheep and lambs											
Lambs, Choice, San Angelo	75.96	79.40	72.04	81.25	54.47	56.50	57.67	59.00	71.60	65.85	
Ewes, Good, San Angelo	42.45	46.23	45.66	51.88	40.25	26.92	38.50	39.83	43.60	41.10	
Feeder lambs											
Choice, San Angelo	80.74	95.86	89.38	109.63	73.19	69.13	68.50	70.67	76.90	76.25	
Wholesale meat prices, Midwest											
Boxed beef cut-out value											
Choice, 700-800 lb.	110.90	117.45	122.17	128.81	119.40	117.65	113.58	108.70	110.74	110.14	
Select, 700-800 lb.	101.91	108.83	114.42	122.09	113.62	108.21	104.64	101.46	105.53	107.91	
Canner and cutter cow beef	66.51	72.57	--	--	--	--	--	--	--	--	
Pork cutout	53.45	64.07	66.83	58.62	75.14	69.61	60.68	56.74	56.68	58.39	
Pork loins, bone-in, 1/4" trim, 14-19 lb.	100.38	117.13	116.97	110.80	121.22	116.21	108.69	97.57	98.50	106.95	
Pork bellies, 12-14 lb.	57.12	77.46	78.61	66.61	98.39	81.91	61.30	63.58	69.13	70.87	
Hams, bone-in, trimmed, 20-23 lb.	45.18	52.02	56.86	43.86	67.54	65.30	57.38	50.69	45.96	48.05	
All fresh beef retail price	260.50	275.30	275.30	300.50	301.70	301.20	303.10	303.50	302.60	304.00	
Commercial slaughter (1,000 head) <sup>2</sup>											
Cattle	36,150	36,247	36,247	3,002	3,239	2,807	3,161	2,903	2,779	3,056	
Steers	17,932	18,060	18,060	1,423	1,628	1,379	1,522	1,375	1,377	1,450	
Heifers	11,868	12,041	12,041	979	1,064	948	1,036	952	883	1,021	
Cows	5,710	5,522	5,522	549	487	429	544	527	473	533	
Bull and stags	639	624	624	51	60	51	59	50	46	52	
Calves	1,282	1,132	1,132	91	94	79	94	87	84	87	
Sheep and lambs	3,701	3,455	3,455	269	273	243	289	287	279	255	
Hogs	101,544	97,955	97,955	8,643	8,374	7,811	9,330	8,717	8,419	8,658	
Barrows and gilts	97,732	94,585	94,585	8,339	8,087	7,544	9,019	8,437	8,155	8,369	
Commercial production (mil. lb.)											
Beef	26,386	26,776	26,776	2,205	2,424	2,120	2,388	2,201	2,110	2,330	
Veal	226	216	216	18	17	15	18	16	16	17	
Lamb and mutton	244	230	230	19	19	16	20	20	19	18	
Pork	19,278	18,905	18,905	1,693	1,600	1,513	1,838	1,733	1,668	1,716	
	Annual			2000		2001				2002	
	1999	2000	2001	III	IV	I	II	III	IV	I	
Hogs and pigs (U.S.) <sup>3</sup>											
Inventory (1,000 head) <sup>1</sup>	62,206	59,342	59,138	59,117	59,495	59,138	57,524	58,223	58,642	58,774	
Breeding (1,000 head) <sup>1</sup>	6,682	6,234	6,270	6,234	6,246	6,270	6,232	6,186	6,158	6,209	
Market (1,000 head) <sup>1</sup>	55,523	53,109	52,868	52,884	53,250	52,868	51,292	52,037	52,484	52,564	
Farrowings (1,000 head)	11,641	11,462	11,303	2,889	2,838	2,748	2,870	2,838	2,846	2,842	
Pig crop (1,000 head)	102,354	101,354	99,473	25,548	25,112	23,963	25,509	25,029	24,972	--	
Cattle on Feed, 7 states (1,000 head) <sup>1, 4</sup>											
Steers and steer calves	5,432	5,768	5,936	5,326	5,584	5,936	5,885	5,521	5,690	6,077	
Heifers and heifer calves	3,552	3,942	4,081	3,602	3,877	4,081	3,913	3,894	3,882	3,769	
Cows and bulls	37	42	59	31	41	59	61	51	41	64	

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

## Crops & Products

Table 17—Supply & Utilization<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	Mil. bu.								\$/bu.	
Wheat													
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	391	990	1,046	2,427	946	2.65	
1999/00	--	62.7	53.8	42.7	2,299	3,339	280	1,021	1,089	2,390	950	2.48	
2000/01*	--	62.6	53.1	42.0	2,232	3,272	298	1,037	1,061	2,396	876	2.62	
2001/02*	--	59.6	48.7	40.2	1,958	2,929	225	1,033	1,000	2,258	671	2.75-2.85	
Rice <sup>6</sup>													
	Mil. acres		Lb./acre	Mil. cwt (rough equiv)								\$/cwt	
1997/98	--	3.1	3.1	5,897.0	183.0	219.5	--	6/ 103.9	87.7	191.6	27.9	9.70	
1998/99	--	3.3	3.3	5,663.0	184.4	223.0	--	6/ 114.0	86.8	200.9	22.1	8.89	
1999/00	--	3.5	3.5	5,866.0	206.0	238.2	--	6/ 121.9	88.8	210.7	27.5	5.93	
2000/01*	--	3.1	3.0	6,281.0	190.9	229.2	--	6/ 114.3	86.4	200.7	28.5	5.61	
2001/02*	--	3.3	3.3	6,429.0	213.0	254.0	--	6/ 123.1	88.0	211.1	42.9	4.10-4.40	
Corn													
	Mil. acres		Bu./acre	Mil. bu.								\$/bu.	
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	5,468	1,846	1,984	9,298	1,787	1.94	
1999/00	--	77.4	70.5	133.8	9,431	11,232	5,665	1,913	1,937	9,515	1,718	1.82	
2000/01*	--	79.6	72.4	136.9	9,915	11,639	5,838	1,967	1,935	9,740	1,899	1.85	
2001/02*	--	75.8	68.8	138.2	9,507	11,416	5,850	2,045	1,975	9,870	1,546	1.85-2.15	
Sorghum													
	Mil. acres		Bu./acre	Mil. bu.								\$/bu.	
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	
1999/00	--	9.3	8.5	69.7	595	660	285	55	255	595	65	1.57	
2000/01*	--	9.2	7.7	60.9	471	536	223	35	236	494	42	1.89	
2001/02*	--	10.3	8.6	59.9	515	556	200	45	260	505	51	1.80-2.10	
Barley													
	Mil. acres		Bu./acre	Mil. bu.								\$/bu.	
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	29	360	142	1.98	
1999/00	--	5.2	4.7	59.2	280	450	138	172	28	338	111	2.13	
2000/01*	--	5.9	5.2	61.1	319	459	123	172	58	353	106	2.11	
2001/02*	--	5.0	4.3	58.2	250	381	95	172	30	297	84	2.20-2.30	
Oats													
	Mil. acres		Bu./acre	Mil. bu.								\$/bu.	
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	
1999/00	--	4.7	2.5	59.6	146	326	180	68	2	250	76	1.12	
2000/01*	--	4.5	2.3	64.2	150	332	189	68	2	259	73	1.10	
2001/02*	--	4.4	1.9	61.3	117	290	155	70	3	228	62	1.45-1.55	
Soybeans <sup>7</sup>													
	Mil. acres		Bu./acre	Mil. bu.								\$/bu.	
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	201	1,590	805	2,595	348	4.93	
1999/00	--	73.7	72.4	36.6	2,654	3,006	164	1,578	975	2,716	290	4.63	
2000/01*	--	74.3	72.4	38.1	2,758	3,052	163	1,641	1,000	2,804	248	4.54	
2001/02*	--	74.1	73.0	39.6	2,891	3,143	173	1,680	1,020	2,873	270	4.00-4.60	
Soybean oil													
					Mil. lbs.								¢/lb.
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	
1999/00	--	--	--	--	17,825	19,426	--	16,056	1,375	17,431	1,995	15.60	
2000/01*	--	--	--	--	18,434	20,502	--	16,219	1,406	17,625	2,877	14.15	
2001/02*	--	--	--	--	18,730	21,685	--	16,750	2,400	19,150	2,535	14.50-16.00	
Soybean meal													
					1,000 tons								\$/ton <sup>8</sup>
1997/98	--	--	--	--	38,176	38,443	--	28,895	9,329	38,225	218	185.5	
1998/99	--	--	--	--	37,792	38,109	--	30,657	7,122	37,779	330	138.5	
1999/00	--	--	--	--	37,591	37,970	--	30,345	7,332	37,678	293	167.7	
2000/01*	--	--	--	--	39,389	39,733	--	31,687	7,662	39,349	383	173.6	
2001/02*	--	--	--	--	40,092	40,525	--	32,350	7,900	40,250	275	150-165	

See footnotes at end of table, next page

**Table 17—Supply & 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>												
1997/98	1.7	13.9	13.4	673	18.8	22.8	--	11.3	7.5	18.8	3.9	65.2
1998/99	0.3	13.4	10.7	625	13.9	18.2	--	10.4	4.3	14.7	3.9	60.2
1999/00	--	14.9	13.4	607	17.0	21.0	--	10.2	6.8	17.0	3.9	45.0
2000/01*	--	15.5	13.1	632	17.2	21.1	--	8.9	6.8	15.6	6.0	49.8
2001/02*	--	15.8	13.8	698	20.1	26.1	--	7.3	10.0	17.3	8.8	32.4

-- = Not available or not applicable. \*February 8, 2001 Supply and Demand Estimates. 1. Marketing year beginning June 1 for wheat, barley, and oats; August 1 for cotton and rice; September 1 for soybeans, corn, and sorghum; October 1 for soybean meal and soybean oil. 2. Conversion factors: hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, and 4.59 480-pound bales of cotton. 3. Includes diversion, acreage reduction, 0/92 & 50/92 programs. 0/92 & 50/92 set-aside includes idled acreage and acreage planted to minor oilseeds, sesame, and crambe. 4. Includes imports. 5. Marketing-year weighted average price received by farmers. Does not include an allowance for loans outstanding and government purchases. 6. Residual included in domestic use. 7. Includes seed. 8. Simple average of 48 percent protein, Decatur. 9. Upland and extra-long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply and use estimates. For 2001/02, cotton price is the average for December 2001. USDA is prohibited by law from publishing cotton price projections.

Information contact: Wilma Davis (202) 694-5304

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

	Marketing year <sup>1</sup>			2001						2002
	1998/1999	1999/2000	2000/2001	Jan	Aug	Sep	Oct	Nov	Dec	Jan
Wheat, no. 1 HRW, Kansas City (\$/bu.) <sup>2</sup>	3.08	2.87	3.30	3.54	3.15	3.18	3.28	3.37	3.26	3.29
Wheat, DNS, Minneapolis (\$/bu.) <sup>3</sup>	3.83	3.65	3.62	3.79	3.54	3.52	3.71	3.69	3.59	3.55
Rice, S.W. La. (\$/cwt) <sup>4</sup>	16.79	12.99	12.46	12.75	12.19	10.97	10.58	10.41	10.29	9.97
Corn, no. 2 yellow, 30-day, Chicago (\$/bu.)	2.06	1.97	1.99	2.03	2.13	2.10	1.98	2.00	2.05	2.06
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	3.29	3.10	3.41	3.64	3.65	3.55	3.38	3.44	3.59	3.61
Barley, feed, Duluth (\$/bu.)	--	--	1.47	1.54	1.49	1.48	1.50	1.50	1.54	1.55
Barley, malting, Minneapolis (\$/bu.)	--	--	2.37	--	2.35	2.34	2.42	2.44	2.48	2.48
U.S. cotton price, SLM, 1-1/16 in. (¢/lb.) <sup>5</sup>	60.12	52.36	51.56	56.66	36.05	33.22	28.42	31.23	32.21	32.13
Northern Europe prices cotton index (¢/lb.) <sup>6</sup>	58.97	52.85	57.25	64.19	43.31	41.13	37.35	38.13	42.85	43.39
U.S. M 1-3/32 in. (¢/lb.) <sup>7</sup>	74.08	59.64	62.54	69.75	51.25	46.06	40.63	42.55	43.75	44.80
Soybeans, no. 1 yellow, 15-day <sup>8</sup> Central Illinois (\$/bu)	4.85	4.76	4.61	4.68	4.98	4.59	4.26	4.31	4.35	4.35
Soybean oil, crude, Decatur (¢/lb.)	19.90	20.50	--	12.53	17.68	15.46	14.38	15.23	12.38	14.80
Soybean meal, high protein, Decatur (\$/ton)	138.50	165.45	--	183.17	178.46	171.67	165.45	166.10	154.20	156.60

-- = Not available. 1. Beginning June 1 for wheat and barley; Aug. 1 for rice and cotton; Sept. 1 for corn, sorghum, and soybeans; Oct. 1 for soybean meal and oil. 2. Ordinary protein. 3. 14 percent protein. 4. Long grain, milled basis. 5. Average spot market. 6. Liverpool Cotlook "A" Index; average of 5 lowest priced growth. 7. Cotton, Memphis territory growth. 8. Soybean 30-day price discontinued. Information contact: Wilma Davis (202) 694-5304

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

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

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

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



**Table 20—Fruit**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
<b>Citrus<sup>1</sup></b>										
Production (1,000 tons)	12,452	15,274	14,561	15,799	15,712	17,270	17,770	13,633	17,276	16,392
Per capita consumpt. (lb.) <sup>2</sup>	24.4	26.0	25.0	24.1	25.2	27.5	27.3	21.0	24.5	25.1
<b>Noncitrus<sup>3</sup></b>										
Production (1,000 tons)	17,124	16,554	17,339	16,348	16,103	18,382	16,545	17,330	18,914	16,457
Per capita consumpt. (lb.) <sup>2</sup>	73.7	73.8	75.6	73.6	73.9	76.1	76.5	81.6	78.7	--
	2001									2002
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
<b>Grower prices</b>										
Apples (¢/pound) <sup>4</sup>	15.7	15.2	14.9	15.2	17.3	21.1	24.7	23.3	22.4	21.7
Pears (¢/pound) <sup>4</sup>	16.85	20.85	--	22.00	22.90	21.65	19.80	19.05	17.1	14.1
Oranges (\$/box) <sup>5</sup>	4.71	4.41	3.77	4.33	5.57	6.53	5.12	3.19	3.44	3.89
Grapefruit (\$/box) <sup>5</sup>	1.41	1.65	3.44	5.01	3.69	6.89	5.29	3.06	2.30	1.98
<b>Stocks, ending</b>										
Fresh apples (mil. lb.)	1,891	1,330	898	487	487	2,806	5,564	4,975	4,355	3,622
Fresh pears (mil. lb.)	55	18	0	18	93	554	517	412	322	238
Frozen fruits (mil. lb.)	1,122	1,000	1,046	1,184	1,148	1,102	1,200	1,143	1,106	1,019
Frozen conc. orange juice (mil. single-strength gallons)	768	842	831	781	690	628	574	574	641	699

-- = 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-treereturns. *Information contact: Susan Pollack (202) 694-5251*

**Table 21—Vegetables**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
<b>Production<sup>1</sup></b>										
Total vegetables (1,000 cwt)	689,070	692,022	785,798	751,715	765,645	763,532	732,803	833,622	822,475	780,134
Fresh (1,000 cwt) <sup>2,4</sup>	389,597	390,528	416,173	397,125	412,010	436,459	420,012	449,683	479,223	477,212
Processed (tons) <sup>3,4</sup>	14,973,630	15,074,707	18,481,238	17,729,497	17,681,732	16,353,639	15,639,548	19,196,942	17,162,580	15,146,100
Mushrooms (1,000 lbs) <sup>5</sup>	776,357	750,799	782,340	777,870	776,677	808,678	847,760	854,394	838,611	--
Potatoes (1,000 cwt)	425,367	430,349	469,425	445,099	499,254	467,091	475,771	478,216	513,621	444,766
Sweet potatoes (1,000 cwt)	12,005	11,027	13,380	12,821	13,216	13,327	12,382	12,234	13,794	14,355
Dry edible beans (1,000 cwt)	22,615	21,862	28,950	30,689	27,912	29,370	30,418	33,085	26,409	19,541
	2001									2002
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
<b>Shipments (1,000 cwt)</b>										
Fresh	23,645	37,308	30,270	20,761	22,934	15,340	22,433	19,075	18,804	24,508
Iceberg lettuce	3,017	4,626	3,436	3,060	3,773	2,976	4,097	2,935	2,683	3,381
Tomatoes, all	4,294	4,189	3,240	2,271	2,702	2,223	3,396	2,871	3,397	4,992
Dry-bulb onions	3,819	4,563	3,212	3,448	4,311	3,844	4,563	3,521	3,433	4,291
Others <sup>6</sup>	12,515	23,930	20,382	11,982	12,148	6,297	10,377	9,748	9,291	11,844
Potatoes, all	18,926	21,139	12,947	9,646	11,653	10,063	12,646	10,987	11,664	13,870
Sweet potatoes	310	239	189	161	226	266	412	651	400	287

-- = Not available. 1. Calendar year except mushrooms. 2. Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes through 1999. In 2000, greens, okra, chile peppers, pumpkins, radishes, and squash were added.

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 agarcus mushrooms only. Excludes specialty varieties. Crop year July 1 - June 30. 6. Includes snap beans, broccoli, cabbage, cauliflower, celery, sweet corn, cucumbers, eggplant, bell peppers, honeydews, and watermelons. *Information contact: Gary Lucier (202) 694-5253*

**Table 22—Other Commodities**

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

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

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

## World Agriculture

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

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01 F	2001/02 F
	<i>Million units</i>									
<b>Wheat</b>										
Area (hectares)	222.9	221.9	214.5	218.7	230.0	228.0	224.7	216.6	218.9	214.7
Production (metric tons)	562.1	558.6	524.0	538.4	581.9	609.2	588.7	585.9	582.3	577.0
Exports (metric tons) <sup>1</sup>	113.1	101.6	101.5	99.1	100.1	104.0	101.9	112.3	102.9	107.2
Consumption (metric tons) <sup>2</sup>	549.8	556.2	546.9	548.4	575.8	583.4	584.3	591.6	589.5	596.0
Ending stocks (metric tons) <sup>3</sup>	170.0	172.4	149.4	139.5	145.6	171.3	175.8	170.0	163.0	144.0
<b>Coarse grains</b>										
Area (hectares)	325.9	318.7	324.0	313.9	322.7	311.2	307.3	300.7	296.4	299.7
Production (metric tons)	871.6	798.9	871.3	802.9	908.5	883.9	889.0	876.5	856.9	873.2
Exports (metric tons) <sup>1</sup>	93.4	86.3	98.4	87.9	91.2	85.6	96.4	104.3	103.9	101.3
Consumption (metric tons) <sup>2</sup>	844.9	838.6	859.6	841.8	875.0	873.4	869.9	881.9	879.5	892.4
Ending stocks (metric tons) <sup>3</sup>	218.7	179.0	190.6	151.8	185.3	195.8	215.0	209.6	187.0	167.7
<b>Rice, milled</b>										
Area (hectares)	146.4	144.9	147.4	148.0	149.8	151.3	152.4	154.7	151.9	150.7
Production (metric tons)	355.7	355.3	364.5	371.5	380.3	386.9	394.1	408.5	397.0	392.2
Exports (metric tons) <sup>1</sup>	14.9	16.5	21.0	19.7	18.9	27.6	24.9	22.8	24.2	22.5
Consumption (metric tons) <sup>2</sup>	358.6	359.2	366.1	372.1	379.0	379.6	387.4	398.1	402.8	403.7
Ending stocks (metric tons) <sup>3</sup>	123.9	120.0	118.4	117.8	119.0	126.3	133.0	143.4	137.5	126.0
<b>Total grains</b>										
Area (hectares)	695.2	685.5	685.9	680.6	702.5	690.5	684.4	672.0	667.2	665.1
Production (metric tons)	1,789.4	1,712.8	1,759.8	1,712.8	1,870.7	1,880.0	1,871.8	1,870.9	1,836.2	1,842.4
Exports (metric tons) <sup>1</sup>	221.4	204.4	220.9	206.7	210.2	217.2	223.2	239.4	231.0	231.0
Consumption (metric tons) <sup>2</sup>	1,753.3	1,754.0	1,772.6	1,762.3	1,829.8	1,836.4	1,841.6	1,871.6	1,871.8	1,892.1
Ending stocks (metric tons) <sup>3</sup>	512.6	471.4	458.4	409.1	449.9	493.4	523.8	523.0	487.5	437.7
<b>Oilseeds</b>										
Crush (metric tons)	184.4	190.1	208.1	217.5	216.7	226.4	240.7	247.6	256.0	265.5
Production (metric tons)	227.5	229.4	261.9	258.9	261.4	286.5	294.7	303.3	312.6	323.8
Exports (metric tons)	38.2	38.7	44.1	44.3	49.6	54.0	54.9	64.5	71.9	71.9
Ending stocks (metric tons)	23.6	20.3	27.2	22.2	19.1	28.6	31.8	34.3	33.6	32.5
<b>Meals</b>										
Production (metric tons)	125.2	131.7	142.1	147.3	147.8	153.9	164.6	168.8	177.0	183.7
Exports (metric tons)	40.8	44.9	46.7	49.8	50.7	52.0	54.0	56.1	56.8	58.9
<b>Oils</b>										
Production (metric tons)	61.1	63.7	69.6	73.1	73.7	75.2	80.6	85.9	88.9	90.9
Exports (metric tons)	21.3	24.3	27.1	26.0	28.3	29.8	31.5	32.8	34.6	35.6
<b>Cotton</b>										
Area (hectares)	32.6	30.7	32.2	35.9	33.8	33.8	33.0	32.3	32.0	34.0
Production (bales)	82.5	77.1	86.0	93.1	89.6	91.8	85.0	87.3	88.5	96.9
Exports (bales)	25.5	26.8	28.4	27.3	28.8	26.7	23.7	27.3	26.5	28.9
Consumption (bales)	85.9	85.4	84.7	86.0	88.0	87.2	85.2	91.8	91.9	91.7
Ending stocks (bales)	34.7	26.8	29.8	36.7	40.1	43.9	45.2	41.7	38.7	43.9
	1992	1993	1994	1995	1996	1997	1998	1999	2000 E	2001 F
<b>Beef and Pork</b> <sup>4</sup>										
Production (metric tons)	111.6	111.6	116.7	122.1	116.6	122.1	127.1	130.4	131.8	133.1
Consumption (metric tons)	109.9	110.6	115.7	120.7	114.1	119.7	124.6	128.4	129.8	131.3
Exports (metric tons) <sup>1</sup>	6.6	6.6	7.2	7.4	7.7	8.2	8.0	9.2	9.1	8.8
<b>Poultry</b> <sup>4</sup>										
Production (metric tons)	38.0	40.5	43.2	47.5	50.4	52.7	53.5	56.5	58.0	59.6
Consumption (metric tons)	37.0	39.4	42.0	47.0	49.6	51.8	52.6	55.3	56.8	58.5
Exports (metric tons) <sup>1</sup>	2.4	2.8	3.6	4.5	5.1	5.6	5.7	6.0	6.6	6.8
<b>Dairy</b>										
Milk production (metric tons) <sup>5</sup>	--	--	--	--	364.4	365.6	368.4	372.0	375.9	376.3

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

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

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

## U.S. Agricultural Trade

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

	Annual			2001						2002
	1999	2000	2001	Jan	Aug	Sep	Oct	Nov	Dec	Jan
<b>Export commodities</b>										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	3.04	3.17	3.50	3.67	3.40	3.39	3.39	3.46	3.37	3.46
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.29	2.24	2.26	2.41	2.36	2.27	2.19	2.28	2.35	2.34
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.14	2.23	2.39	2.55	2.43	2.40	2.40	2.41	2.48	2.45
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	5.02	5.26	4.93	5.22	5.35	5.06	4.46	4.73	4.75	4.75
Soybean oil, Decatur (¢/lb.)	17.51	15.01	14.49	12.54	17.08	15.46	14.38	15.23	15.10	14.82
Soybean meal, Decatur (\$/ton)	141.52	174.69	168.49	183.17	178.46	171.49	165.45	166.10	154.18	158.01
Cotton, 7-market avg. spot (¢/lb.)	52.30	57.47	39.68	56.66	36.05	33.22	28.42	31.23	32.21	32.13
Tobacco, avg. price at auction (¢/lb.)	177.82	182.73	186.66	205.05	179.06	188.49	190.58	198.03	199.53	195.96
Rice, f.o.b., mill, Houston (\$/cwt)	16.99	14.84	13.48	15.00	14.81	14.25	14.00	13.75	12.75	12.75
Inedible tallow, Chicago (¢/lb.)	12.99	9.92	12.50	15.25	16.25	14.15	11.18	--	10.50	9.50
<b>Import commodities</b>										
Coffee, N.Y. spot (\$/lb.)	1.05	0.92	0.55	0.65	0.47	0.44	0.38	0.42	0.42	0.43
Rubber, N.Y. spot (¢/lb.)	36.66	37.72	33.88	35.98	34.48	33.08	31.97	31.14	30.35	32.21
Cocoa beans, N.Y. (\$/lb.)	0.47	0.36	0.47	0.42	0.45	0.44	0.47	0.54	0.59	0.61

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

**Table 25—Trade Balance**

	Fiscal year			2000		2001				
	2000	2001	2002 F	Dec	Jul	Aug	Sep	Oct	Nov	Dec
\$ million										
<b>Exports</b>										
Agricultural	50,798	52,783	54,500	4,485	3,939	4,468	3,891	5,253	5,260	4,685
Nonagricultural	650,853	639,083	--	55,037	45,948	50,296	46,486	50,089	47,869	45,552
Total <sup>1</sup>	701,651	691,866	--	59,522	49,887	54,764	50,377	55,342	53,129	50,237
<b>Imports</b>										
Agricultural	38,864	39,030	40,000	3,203	3,223	3,163	3,039	3,515	3,365	3,143
Nonagricultural	1,128,904	1,136,637	--	94,233	90,616	92,700	85,795	96,658	87,816	78,480
Total <sup>2</sup>	1,167,768	1,175,667	--	97,436	93,839	95,863	88,834	100,173	91,181	81,623
<b>Trade balance</b>										
Agricultural	11,934	13,753	14,500	1,282	716	1,305	852	1,738	1,895	1,542
Nonagricultural	-478,051	-497,554	--	-39,196	-44,668	-42,404	-39,309	-46,569	-39,947	-32,928
Total <sup>3</sup>	-466,117	-483,801	--	-37,914	-43,952	-41,099	-38,457	-44,831	-38,052	-31,386

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

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

	Annual		2000		2001					
	1999	2000	2001	Dec	Jul	Aug	Sep	Oct	Nov	Dec
<i>1995 = 100</i>										
Total U.S. Trade	114.2	119.0	127.3	121.1	130.9	128.6	130.6	130.5	130.7	131.5
<b>U.S. markets</b>										
All agricultural trade	117.5	120.2	130.1	123.5	134.5	131.4	133.3	133.2	133.6	135.4
Bulk commodities	116.6	121.2	132.6	125.0	138.1	134.7	136.8	136.5	136.7	138.7
Corn	116.3	119.2	132.8	123.7	139.6	136.3	138.6	138.2	138.5	141.8
Cotton	112.4	118.3	128.5	122.0	131.6	128.9	131.8	132.0	131.1	131.5
Rice	112.5	117.8	127.5	119.1	131.8	129.5	131.8	131.7	131.5	132.8
Soybeans	119.4	127.3	136.4	131.0	141.8	137.3	138.3	138.1	139.0	140.1
Tobacco, raw	112.8	134.3	145.3	139.7	149.3	144.0	145.1	145.6	146.2	147.7
Wheat	124.6	120.2	134.1	122.8	142.3	140.3	143.0	142.3	142.0	144.4
High-value products	118.3	119.4	128.1	122.3	131.6	128.8	130.6	130.6	131.1	132.9
Processed intermediates	115.1	120.2	129.6	122.8	134.8	131.7	133.5	133.2	133.4	134.5
Soymeal	107.2	117.0	132.9	114.6	150.3	148.1	151.0	150.1	149.6	149.8
Soyoil	98.1	105.2	109.3	106.6	110.3	109.4	110.7	110.0	109.7	109.3
Produce and horticulture	117.3	122.0	130.5	125.0	132.7	130.2	131.7	132.3	132.9	134.5
Fruits	116.8	119.2	128.8	122.8	130.9	128.7	130.7	131.2	131.6	133.8
Vegetables	113.6	114.4	121.5	116.4	121.4	121.0	123.2	124.0	124.2	126.5
High-value processed	121.4	117.8	126.1	120.9	128.6	125.9	127.8	128.0	128.5	131.0
Fruit juices	120.1	123.4	132.5	127.3	134.2	131.5	133.1	133.8	134.5	137.0
Poultry	155.0	116.9	114.9	115.2	114.7	114.1	115.0	114.5	114.4	114.7
Red meats	124.0	121.7	135.7	128.4	138.7	133.8	135.7	136.8	138.0	143.7
<b>U.S. competitors</b>										
All agricultural trade	122.1	135.5	141.9	138.2	145.2	140.8	141.8	141.9	142.5	141.5
Bulk commodities	130.4	134.0	140.1	136.3	141.6	138.7	141.1	141.4	140.5	139.5
Corn	120.5	134.0	140.1	136.7	142.7	139.3	139.9	140.3	142.5	143.5
Cotton	130.7	133.4	129.5	124.1	132.1	129.2	131.7	130.2	129.1	128.8
Rice	120.5	131.1	142.1	135.8	146.3	142.8	144.3	144.0	142.8	142.9
Soybeans	132.1	134.6	151.1	138.6	155.3	155.7	160.8	162.1	156.8	151.1
Tobacco, raw	127.3	121.8	123.7	121.8	126.4	123.7	125.4	124.2	119.5	115.6
Wheat	118.5	129.8	136.6	132.1	138.4	134.8	137.3	136.9	137.2	137.3
High-value products	125.2	139.1	145.2	141.8	148.9	144.0	145.0	145.0	145.8	144.8
Processed intermediates	127.1	138.2	145.5	141.1	148.6	144.4	146.3	146.4	146.4	145.3
Soymeal	132.0	136.9	152.4	141.8	156.6	155.9	160.4	161.4	156.3	150.6
Soyoil	123.3	130.0	142.2	133.3	145.3	144.0	146.9	147.8	146.1	143.0
Produce and horticulture	120.0	133.3	137.1	135.3	140.3	135.9	136.4	136.4	137.4	136.7
Fruits	123.5	135.9	144.1	138.7	148.5	144.5	145.6	145.5	145.2	145.0
Vegetables	109.2	121.7	125.2	123.7	127.8	124.2	124.5	124.1	124.9	124.3
High-value processed	125.7	141.3	147.5	144.2	151.8	146.2	146.7	146.7	148.0	147.0
Fruit juices	122.1	137.0	143.9	139.2	148.2	143.7	144.8	144.8	145.8	145.5
Poultry	121.6	134.9	143.7	137.9	148.0	144.4	145.3	145.6	145.3	143.0
Red meats	122.3	137.8	145.5	140.9	149.1	143.6	146.1	145.5	145.8	144.9
<b>U.S. suppliers</b>										
All agricultural trade	113.5	120.0	125.2	121.7	126.7	124.5	127.3	127.1	126.3	125.4
High-value products	111.6	118.2	122.6	119.9	124.2	121.9	124.4	123.8	123.5	122.8
Processed intermediates	114.8	121.4	127.0	123.8	128.1	126.0	128.6	128.4	128.2	127.9
Grains and feeds	113.0	117.9	124.0	119.5	124.6	123.7	125.8	126.0	126.0	126.8
Vegetable oils	120.9	130.1	137.9	133.9	139.9	136.8	139.0	139.2	139.0	138.3
Produce and horticulture	101.1	103.7	103.8	103.5	104.8	103.5	105.9	104.7	103.9	102.4
Fruits	97.2	98.0	102.2	99.7	104.4	103.0	106.8	106.1	104.0	101.8
Vegetables	84.1	81.3	79.2	80.6	78.9	78.2	80.5	78.5	78.3	77.4
High-value processed	114.9	123.7	129.7	125.8	131.8	128.9	131.4	131.0	130.9	130.4
Cocoa and products	126.1	137.6	142.2	139.7	142.7	139.7	142.5	143.8	143.3	142.2
Coffee and products	111.6	116.4	121.6	116.5	125.6	124.6	127.7	127.1	124.8	122.0
Dairy products	122.5	137.9	143.6	139.9	147.1	141.1	143.5	142.4	143.7	142.9
Fruit juices	122.3	127.8	138.9	131.2	142.6	140.9	144.8	145.0	141.8	138.2
Meats	105.6	115.4	127.6	123.3	128.4	125.9	129.8	128.9	128.5	128.6

Real indexes adjust nominal exchange rates for relative rates of inflation among countries. A higher value means the dollar has appreciated. The weights used for "total U.S. trade" index are based on U.S. total merchandise exports to the largest 85 trading partners. Weights are based on relative importance of major U.S. customers, competitors in world markets, and suppliers to the U.S. Indexes are subject to revision for up to 1 year due to delayed reporting by some countries. High-value products are total agricultural products minus bulk commodities. Source: Nominal exchange rates are obtained from the IMF International Financial Statistics. Exchange rates for the EU-11 are obtained from the Board of Governors of the Federal Reserve System. Full historical series are available back to January 1970 at <http://usda.mannlib.cornell.edu/data-sets/international/88021/>

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

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



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

	Fiscal year			Dec		Fiscal year			Dec	
	2000	2001	2002 F	2000	2001	2000	2001	2002 F	2000	2001
	1,000 units					\$ million				
Exports										
Animals, live	--	--	--	--	--	609	727	--	85	91
Meats and preps., excl. poultry (mt) <sup>1</sup>	2,439	2,454	1,900	186	207	5,429	5,199	4,800	403	416
Dairy products	--	--	--	--	--	998	1,118	1,100	82	88
Poultry meats (mt)	2,781	3,089	3,200	202	247	1,943	2,218	2,300	147	198
Fats, oils, and greases (mt)	1,207	1,046	1,000	83	94	421	319	--	25	31
Hides and skins, incl. furskins	--	--	--	--	--	1,428	1,943	2,100	132	150
Cattle hides, whole (no.)	20,904	22,602	--	1,643	2,109	1,117	1,446	--	100	114
Mink pelts (no.)	4,352	4,277	--	80	95	111	122	--	3	3
Grains and feeds (mt) <sup>2</sup>	103,653	98,844	--	8,389	8,230	13,789	13,830	14,400	1,173	1,155
Wheat (mt) <sup>3</sup>	27,838	25,187	26,000	2,496	2,209	3,384	3,238	3,600	314	299
Wheat flour (mt)	837	496	600	54	49	134	107	--	11	13
Rice (mt)	3,307	3,158	3,200	412	293	905	778	700	95	65
Feed grains, incl. products (mt) <sup>4</sup>	57,199	55,791	57,300	4,197	4,377	5,483	5,460	5,600	417	436
Feeds and fodders (mt)	12,951	12,741	12,500	1,091	1,173	2,483	2,775	2,800	213	224
Other grain products (mt)	1,521	1,472	--	138	129	1,400	1,471	--	123	119
Fruits, nuts, and preps. (mt)	3,748	3,969	--	335	292	3,877	4,097	4,800	334	311
Fruit juices, incl. froz. (1,000 hectoliters)	11,899	10,785	--	871	779	715	681	--	54	51
Vegetables and preps.	--	--	--	--	--	4,440	4,513	3,100	393	390
Tobacco, unmanufactured (mt)	180	176	200	21	19	1,227	1,181	1,400	138	130
Cotton, excl. linters (mt) <sup>5</sup>	1,473	1,656	2,200	114	201	1,809	2,080	2,200	162	189
Seeds (mt)	720	703	--	56	67	772	727	700	79	91
Sugar, cane or beet (mt)	113	98	--	7	5	40	38	--	3	3
Oilseeds and products (mt)	36,053	37,093	39,500	3,787	4,550	8,391	8,708	9,200	867	995
Oilseeds (mt)	--	--	--	--	--	--	--	--	--	--
Soybeans (mt)	26,045	26,659	28,000	2,900	3,627	5,071	5,106	5,100	569	656
Protein meal (mt)	6,867	7,186	--	544	569	1,258	1,419	--	113	108
Vegetable oils (mt)	2,134	2,067	--	246	237	1,349	1,175	--	124	143
Essential oils (mt)	53	55	--	4	4	592	675	--	44	47
Other	--	--	--	--	--	4,318	4,728	--	364	348
Total	--	--	--	--	--	50,798	52,783	54,500	4,485	4,685
Imports										
Animals, live	--	--	--	--	--	1,735	2,198	2,300	273	171
Meats and preps., excl. poultry (mt)	1,555	1,600	1,700	116	94	3,723	4,091	4,400	291	252
Beef and veal (mt)	1,027	1,056	--	69	50	2,405	2,645	--	174	138
Pork (mt)	402	399	--	35	31	958	1,038	--	84	75
Dairy products	--	--	--	--	--	1,653	1,727	1,700	148	158
Poultry and products	--	--	--	--	--	287	258	--	17	24
Fats, oils, and greases (mt)	105	107	--	8	7	69	63	--	4	4
Hides and skins, incl. furskins (mt)	--	--	--	--	--	160	162	--	17	16
Wool, unmanufactured (mt)	25	21	--	1	1	66	53	--	3	2
Grains and feeds	--	--	--	--	--	3,038	3,187	3,500	271	299
Fruits, nuts, and preps., excl. juices (mt) <sup>6</sup>	8,367	8,123	8,300	688	688	4,545	4,615	5,400	436	417
Bananas and plantains (mt)	4,396	4,093	4,100	321	353	1,128	1,156	1,200	86	103
Fruit juices (1,000 hectoliters)	32,226	29,284	28,000	1,846	2,467	783	649	--	41	56
Vegetables and preps.	--	--	--	--	--	4,660	5,182	5,400	441	438
Tobacco, unmanufactured (mt)	220	211	300	18	21	651	649	800	61	58
Cotton, unmanufactured (mt)	34	49	--	2	3	28	23	--	1	2
Seeds (mt)	444	307	--	21	21	491	431	--	24	20
Nursery stock and cut flowers	--	--	--	--	--	1,165	1,156	1,200	82	78
Sugar, cane or beet (mt)	1,368	1,382	--	73	84	484	528	--	28	32
Oilseeds and products (mt)	4,075	4,077	3,900	300	262	1,871	1,689	1,800	133	117
Oilseeds (mt)	1,103	997	--	33	31	310	280	--	13	12
Protein meal (mt)	1,205	1,150	--	111	82	152	152	--	15	11
Vegetable oils (mt)	1,767	1,930	--	156	149	1,410	1,257	--	105	94
Beverages, excl. fruit juices (1,000 hectoliters)	--	--	--	--	--	4,701	4,991	--	346	374
Coffee, tea, cocoa, spices (mt)	2,841	2,489	--	189	259	5,218	3,978	--	315	370
Coffee, incl. products (mt)	1,411	1,213	1,200	92	110	2,906	1,761	1,600	147	130
Cocoa beans and products (mt)	1,045	898	1,000	69	119	1,465	1,390	1,500	102	178
Rubber and allied gums (mt)	1,249	1,059	1,000	91	65	841	668	600	58	35
Other	--	--	--	--	--	2,694	2,733	--	213	219
Total	--	--	--	--	--	38,864	39,030	40,000	3,203	3,143

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

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

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

linters. 6. Value projection includes juice.

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

**Table 28—U.S. Agricultural Exports by Region**

	Fiscal year			2000		2001				
	2000	2001	2002 F	Dec	Jul	Aug	Sep	Oct	Nov	Dec
	\$ million									
<b>Region and country</b>										
<b>Western Europe</b>	6,546	6,779	7,000	702	417	474	398	735	929	775
European Union <sup>1</sup>	6,206	6,267	6,600	685	388	455	382	700	724	728
Belgium-Luxembourg	516	626	--	79	40	49	46	57	81	54
France	348	352	--	53	36	16	21	38	36	68
Germany	912	906	--	73	69	72	55	113	72	87
Italy	559	508	--	55	28	43	46	70	58	70
Netherlands	1,390	1,397	--	184	54	68	59	125	183	167
United Kingdom	1,032	1,051	--	71	87	73	80	93	129	108
Portugal	134	138	--	22	6	9	4	18	22	20
Spain, incl. Canary Islands	642	591	--	83	17	61	32	99	91	86
Other Western Europe	340	512	400	17	30	19	16	35	205	46
Switzerland	250	422	--	12	23	8	8	25	197	38
<b>Eastern Europe</b>	168	191	200	13	14	12	11	14	30	34
Poland	47	83	--	4	8	6	4	5	6	12
Former Yugoslavia	67	34	--	2	1	1	1	2	12	13
Romania	12	24	--	5	1	1	1	2	4	4
<b>Former Soviet Union</b>	921	1,029	1,300	58	82	106	95	128	131	87
Russia	659	823	1,100	41	73	88	81	96	113	69
<b>Asia</b>	21,931	22,321	23,100	1,953	1,618	1,823	1,600	2,186	2,075	1,922
West Asia (Mideast)	2,364	2,194	2,100	202	161	225	160	310	207	194
Turkey	701	569	600	74	43	46	38	81	56	37
Iraq	8	8	--	--	--	--	--	--	--	--
Israel, incl. Gaza and W. Bank	459	436	--	50	20	48	22	48	30	51
Saudi Arabia	481	470	500	41	44	57	41	22	31	36
South Asia	415	571	700	53	68	60	59	90	83	92
Bangladesh	82	105	--	16	8	9	7	28	13	16
India	185	294	--	20	36	38	34	40	40	42
Pakistan	93	97	--	6	9	13	10	13	19	25
China	1,466	1,884	2,300	168	69	75	74	220	228	182
Japan	9,304	8,953	9,000	775	615	699	652	774	757	682
Southeast Asia	2,581	2,923	2,900	194	219	228	187	290	288	247
Indonesia	675	879	900	50	71	69	62	96	46	67
Philippines	866	836	800	68	55	71	52	67	90	56
Other East Asia	5,800	5,796	6,100	561	486	537	468	502	512	525
Korea, Rep.	2,532	2,552	2,800	253	221	250	204	202	233	239
Hong Kong	1,249	1,253	1,300	123	93	110	107	126	118	99
Taiwan	2,010	1,985	2,000	185	172	177	156	175	162	186
<b>Africa</b>	2,237	2,125	2,100	217	168	185	204	208	226	181
<b>North Africa</b>	1,522	1,467	1,500	153	116	134	149	129	181	123
Morocco	139	120	--	24	4	11	8	4	9	17
Algeria	254	211	--	16	11	12	18	26	28	25
Egypt	1,056	1,008	1,100	84	97	104	106	89	132	71
Sub-Saharan	715	659	600	64	52	51	55	79	45	58
Nigeria	160	233	--	14	26	20	23	26	13	23
S. Africa	165	108	--	6	10	11	7	7	5	8
<b>Latin America and Caribbean</b>	10,626	11,572	11,600	875	940	1,140	892	1,092	1,023	972
Brazil	253	219	200	19	21	18	14	23	22	23
Caribbean Islands	1,463	1,399	1,300	113	103	117	109	134	138	112
Central America	1,132	1,185	1,100	94	95	120	95	108	139	99
Colombia	427	442	400	29	38	39	34	39	30	44
Mexico	6,317	7,289	7,600	542	584	745	570	697	606	604
Peru	200	182	--	5	21	21	17	27	17	18
Venezuela	405	416	400	27	44	51	26	33	34	29
<b>Canada</b>	7,525	8,011	8,500	607	649	664	624	768	733	653
<b>Oceania</b>	488	473	500	41	32	38	41	51	46	35
<b>Total</b>	50,798	52,783	54,500	4,485	3,939	4,468	3,891	5,253	5,260	4,685

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

## Farm Income

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

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001F
	\$ billion									
Final crop output	89.0	82.6	100.3	95.7	115.5	112.3	101.5	93.2	95.3	97.3
Food grains	8.5	8.3	9.5	10.4	10.8	10.4	8.8	7.0	6.6	6.7
Feed crops	20.1	20.2	20.3	24.5	27.3	27.1	22.7	19.6	20.0	21.4
Cotton	5.2	5.3	6.7	6.9	7.0	6.3	6.1	4.7	4.6	4.0
Oil crops	13.3	13.2	14.7	15.5	16.3	19.7	17.4	13.6	13.9	14.8
Tobacco	3.0	2.9	2.7	2.5	2.8	2.9	2.8	2.3	2.3	1.8
Fruits and tree nuts	10.2	10.3	10.3	11.1	11.9	13.1	11.6	12.3	12.7	13.4
Vegetables	11.8	13.7	14.1	15.0	14.5	14.7	15.2	15.2	15.9	16.2
All other crops	13.7	13.7	14.7	15.0	15.8	16.9	17.2	17.9	18.2	18.7
Home consumption	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Value of inventory adjustment <sup>1</sup>	3.2	-5.3	7.2	-5.3	9.0	1.0	-0.3	0.4	1.0	0.2
Final animal output	87.2	92.1	89.8	87.8	92.1	96.5	94.2	95.3	99.3	108.9
Meat animals	47.7	51.0	46.7	44.9	44.2	49.7	43.3	45.6	53.0	55.0
Dairy products	19.7	19.3	20.0	19.9	22.8	20.9	24.1	23.2	20.6	25.3
Poultry and eggs	15.5	17.4	18.5	19.1	22.5	22.3	22.9	22.9	21.8	24.2
Miscellaneous livestock	2.7	3.0	3.2	3.4	3.6	3.6	3.7	3.8	4.1	4.1
Home consumption	0.5	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4
Value of inventory adjustment <sup>1</sup>	1.0	1.1	1.1	0.2	-1.1	-0.4	-0.3	-0.6	-0.6	0.0
Services and forestry	15.2	17.0	18.1	19.9	20.8	22.2	23.7	25.4	24.0	24.3
Machine hire and customwork	1.8	1.9	2.1	1.9	2.2	2.4	2.2	2.0	2.2	2.2
Forest products sold	2.2	2.5	2.6	2.8	2.7	2.9	3.1	2.7	2.8	2.8
Other farm income	4.1	4.6	4.3	5.8	6.2	6.9	8.7	10.2	8.7	8.8
Gross imputed rental value of farm dwellings	7.2	8.1	9.0	9.4	9.8	10.1	9.8	10.4	10.4	10.5
<b>Final agricultural sector output<sup>2</sup></b>	<b>191.4</b>	<b>191.6</b>	<b>208.2</b>	<b>203.5</b>	<b>228.4</b>	<b>231.0</b>	<b>219.5</b>	<b>213.8</b>	<b>218.6</b>	<b>230.6</b>
<i>Minus</i> Intermediate consumption outlays:	93.4	100.7	104.9	109.7	113.2	121.0	118.6	119.6	122.4	127.2
Farm origin	38.6	41.3	41.3	41.8	42.7	46.9	44.8	45.6	47.7	48.6
Feed purchased	20.1	21.4	22.6	23.8	25.2	26.3	25.0	24.5	24.5	25.6
Livestock and poultry purchased	13.6	14.7	13.3	12.5	11.3	13.8	12.6	13.8	15.8	15.4
Seed purchased	4.9	5.2	5.4	5.5	6.2	6.7	7.2	7.2	7.3	7.5
Manufactured inputs	22.7	23.1	24.4	26.1	28.6	29.2	28.2	27.1	28.7	30.8
Fertilizers and lime	8.3	8.4	9.2	10.0	10.9	10.9	10.6	9.9	10.0	11.8
Pesticides	6.5	6.7	7.2	7.7	8.5	9.0	9.0	8.6	8.5	8.5
Petroleum fuel and oils	5.3	5.4	5.3	5.4	6.0	6.2	5.6	5.6	7.2	7.3
Electricity	2.6	2.7	2.7	3.0	3.2	3.0	2.9	3.0	3.0	3.2
Other intermediate expenses	32.1	36.2	39.2	41.7	41.9	44.9	45.6	46.9	46.0	47.7
Repair and maintenance of capital items	8.5	9.2	9.1	9.5	10.3	10.4	10.4	10.5	10.8	11.2
Machine hire and customwork	3.8	4.4	4.8	4.8	4.7	4.9	5.4	5.3	5.0	5.2
Marketing, storage, and transportation	4.5	5.6	6.8	7.2	6.9	7.1	6.9	7.3	7.5	7.8
Contract labor	1.7	1.8	1.8	2.0	2.1	2.5	2.4	2.5	2.7	2.8
Miscellaneous expenses	13.6	15.2	16.7	18.3	17.9	19.9	20.6	21.4	20.0	20.7
<i>Plus</i> Net government transactions:	2.7	6.9	1.0	0.1	0.1	0.1	4.9	14.2	15.5	12.5
+ Direct government payments	9.2	13.4	7.9	7.3	7.3	7.5	12.4	21.5	22.9	20.0
- Motor vehicle registration and licensing fees	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
- Property taxes	6.1	6.2	6.5	6.7	6.8	7.0	7.0	6.8	6.9	7.0
<b>Gross value added</b>	<b>100.7</b>	<b>97.8</b>	<b>104.3</b>	<b>93.9</b>	<b>115.3</b>	<b>110.1</b>	<b>105.7</b>	<b>108.4</b>	<b>111.7</b>	<b>115.9</b>
<i>Minus</i> Capital consumption	18.3	18.3	18.6	19.2	19.4	19.6	20.0	20.3	20.6	20.7
<b>Net value added<sup>2</sup></b>	<b>82.4</b>	<b>79.5</b>	<b>85.7</b>	<b>74.8</b>	<b>95.9</b>	<b>90.5</b>	<b>85.8</b>	<b>88.1</b>	<b>91.1</b>	<b>95.1</b>
<i>Minus</i> Factor payments:	34.6	34.8	36.8	37.8	41.1	42.0	42.9	43.8	44.7	45.8
Employee compensation (total hired labor)	12.3	13.2	13.5	14.3	15.2	16.0	16.9	17.5	17.3	18.1
Net rent received by nonoperator landlords	11.2	10.9	11.8	10.9	13.0	12.9	12.7	12.8	13.2	13.4
Real estate and non-real estate interest	11.0	10.7	11.6	12.6	13.0	13.1	13.4	13.6	14.1	14.2
<b>Net farm income<sup>2</sup></b>	<b>47.8</b>	<b>44.7</b>	<b>48.9</b>	<b>36.9</b>	<b>54.8</b>	<b>48.5</b>	<b>42.9</b>	<b>44.3</b>	<b>46.4</b>	<b>49.4</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 31. A negative value is an offset to production from prior years included in current-year sales. 2. Final sector output is the gross value of commodities and services produced within a year. Net value added is the sector's contribution to the National economy and is the sum of income from production earned by all factors of production. Net farm income is farm operators' share of income from the sector's production activities. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development. *Information contact: Roger Strickland: rogers@ers.usda.gov*  
To confirm that this table contains the current forecast, go to <http://www.ers.usda.gov/briefing/farmincome/fore/fore.htm>

**Table 30—Farm Income Statistics**

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

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

Information contact: Roger Strickland: [rogers@ers.usda.gov](mailto:rogers@ers.usda.gov)

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

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

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

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



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

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

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

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

**Table 33—Cash Receipts from Farming**

	Annual			2000	2001					
	1998	1999	2000	Nov	Jun	Jul	Aug	Sep	Oct	Nov
<i>\$ million</i>										
<b>Commodity cash receipts<sup>1</sup></b>	195,816	188,132	193,586	20,327	15,230	17,380	16,964	18,270	22,481	20,327
Livestock and products	94,121	95,547	99,473	8,307	9,029	9,864	8,926	8,648	9,458	8,307
Meat animals	43,339	45,614	52,994	3,708	4,471	4,933	4,281	4,155	4,944	3,708
Dairy products	24,114	23,207	20,622	1,881	2,223	2,218	2,160	2,180	2,098	1,881
Poultry and eggs	22,947	22,898	21,789	2,119	2,057	1,955	2,196	1,943	2,165	2,119
Other	3,720	3,828	4,067	600	279	757	290	370	251	600
Crops	101,695	92,585	94,113	12,019	6,201	7,517	8,038	9,623	13,023	12,019
Food grains	8,822	6,965	6,639	518	814	1,309	759	748	611	518
Feed crops	22,655	19,622	19,960	2,754	1,113	1,457	1,908	2,207	3,021	2,754
Cotton (lint and seed)	6,073	4,698	4,555	1,899	61	87	135	196	1,022	1,899
Tobacco	2,803	2,273	2,315	280	0	192	362	354	99	280
Oil-bearing crops	17,377	13,608	13,857	1,409	447	726	807	1,303	3,656	1,409
Vegetables and melons	15,160	15,236	15,889	1,224	1,651	1,449	1,746	1,978	1,642	1,224
Fruits and tree nuts	11,649	12,287	12,692	1,508	1,134	1,269	1,325	1,174	1,275	1,508
Other	17,156	17,894	18,206	2,428	980	1,028	996	1,661	1,698	2,428
<b>Government payments</b>	12,380	21,513	22,896	431	--	--	--	--	--	--
<b>Total</b>	208,196	209,645	216,482	20,757	15,230	17,380	16,964	18,270	22,481	20,327

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

**Table 34—Cash Receipts from Farm Marketings, by State**

Region and State	Livestock and products				Crops <sup>1</sup>				Total <sup>1</sup>			
	1999	2000	Oct 2001	Nov 2001	1999	2000	Oct 2001	Nov 2001	1999	2000	Oct 2001	Nov 2001
\$ million												
<b>North Atlantic</b>												
Maine	286	262	22	23	208	242	17	12	494	504	40	35
New Hampshire	63	60	5	5	92	94	7	7	155	154	12	11
Vermont	472	441	42	39	69	67	3	6	541	508	45	45
Massachusetts	101	91	8	7	279	301	27	35	380	392	34	42
Rhode Island	8	8	1	1	39	40	3	3	47	48	3	4
Connecticut	180	165	15	19	303	337	18	19	483	503	33	38
New York	2,049	1,934	193	190	1,098	1,189	122	117	3,148	3,123	316	307
New Jersey	193	193	8	42	536	619	43	46	729	812	50	89
Pennsylvania	2,890	2,781	258	228	1,189	1,252	124	140	4,079	4,033	383	368
<b>North Central</b>												
Ohio	1,777	1,751	161	156	2,695	2,654	454	263	4,472	4,405	615	419
Indiana	1,583	1,695	157	165	2,814	2,886	618	273	4,397	4,581	775	438
Illinois	1,525	1,710	155	123	5,086	5,312	760	355	6,611	7,022	915	478
Michigan	1,328	1,335	135	116	2,139	2,140	288	277	3,467	3,475	423	393
Wisconsin	4,136	3,804	392	336	1,362	1,416	211	198	5,498	5,221	602	533
Minnesota	3,550	3,875	356	314	3,543	3,647	591	605	7,093	7,522	947	919
Iowa	4,713	5,747	513	500	5,036	5,027	960	655	9,749	10,774	1,473	1,155
Missouri	2,480	2,677	239	214	1,796	1,890	347	279	4,276	4,567	586	493
North Dakota	633	639	64	42	2,091	2,050	281	311	2,724	2,689	345	353
South Dakota	1,830	2,035	195	162	1,743	1,755	417	243	3,573	3,790	611	406
Nebraska	5,426	5,923	537	363	2,996	3,029	539	435	8,422	8,952	1,076	798
Kansas	5,012	5,488	541	401	2,464	2,417	302	261	7,477	7,905	844	662
<b>Southern</b>												
Delaware	566	557	46	45	159	184	33	19	725	741	79	64
Maryland	937	848	83	82	559	625	88	71	1,496	1,473	171	153
Virginia	1,579	1,549	135	121	702	732	119	93	2,281	2,281	254	214
West Virginia	334	339	35	30	53	51	4	4	387	391	39	34
North Carolina	3,840	4,275	384	367	2,861	3,135	359	410	6,700	7,410	743	777
South Carolina	774	792	79	74	638	752	72	81	1,412	1,544	151	155
Georgia	3,329	3,105	312	272	1,901	1,945	339	290	5,230	5,050	651	562
Florida	1,361	1,378	125	124	5,495	5,573	238	501	6,856	6,951	364	625
Kentucky	2,254	2,335	130	423	1,301	1,271	80	247	3,554	3,605	210	670
Tennessee	1,002	990	117	96	956	1,030	151	231	1,958	2,020	267	328
Alabama	2,746	2,684	262	226	658	588	114	113	3,404	3,272	375	338
Mississippi	2,145	2,037	193	172	1,012	886	246	345	3,156	2,922	439	517
Arkansas	3,397	3,248	314	272	1,816	1,639	538	410	5,213	4,887	852	681
Louisiana	622	653	55	46	1,197	1,167	194	273	1,819	1,820	249	319
Oklahoma	3,136	3,441	338	249	842	779	71	73	3,978	4,220	409	322
Texas	8,484	9,162	911	646	4,588	4,181	485	534	13,071	13,344	1,396	1,180
<b>Western</b>												
Montana	932	1,102	136	78	787	704	58	95	1,719	1,806	194	173
Idaho	1,616	1,628	172	142	1,666	1,761	221	331	3,282	3,389	393	473
Wyoming	679	795	47	49	171	160	20	49	850	954	68	97
Colorado	3,016	3,332	295	238	1,305	1,229	118	169	4,321	4,561	413	407
New Mexico	1,441	1,613	165	133	529	473	56	96	1,969	2,086	222	229
Arizona	991	1,063	122	80	1,233	1,226	73	153	2,224	2,290	195	233
Utah	713	770	77	71	244	240	33	32	957	1,010	110	102
Nevada	212	237	25	15	126	149	25	23	338	386	50	38
Washington	1,648	1,710	162	162	3,201	3,339	444	387	4,849	5,050	605	548
Oregon	793	826	80	74	2,195	2,223	316	271	2,988	3,049	396	345
California	6,651	6,269	652	568	18,346	19,241	2,351	2,140	24,997	25,510	3,003	2,708
Alaska	29	32	3	3	21	20	2	2	50	52	4	4
Hawaii	88	87	7	7	444	444	41	38	532	530	48	45
<b>U.S.</b>	<b>95,547</b>	<b>99,473</b>	<b>9,458</b>	<b>8,307</b>	<b>92,585</b>	<b>94,113</b>	<b>13,023</b>	<b>12,019</b>	<b>188,132</b>	<b>193,586</b>	<b>22,481</b>	<b>20,327</b>

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 & Function**

	Fiscal year									
	1994	1995	1996	1997	1998	1999	2000	2001	2002 <sup>4</sup>	2003 <sup>4</sup>
	\$ million									
<b>Commodity/Program</b>										
Feed grains:										
Corn	625	2,090	2,021	2,587	2,873	5,402	10,136	6,297	3,241	1,803
Grain sorghum	130	153	261	284	296	502	979	478	206	202
Barley	202	129	114	109	168	224	397	217	97	85
Oats	5	19	8	8	17	41	61	36	14	8
Corn and oat products	10	1	0	0	0	0	6	8	12	0
Total feed grains	972	2,392	2,404	2,988	3,354	6,169	11,579	7,036	3,570	2,098
Wheat and products	1,729	803	1,491	1,332	2,187	3,435	5,321	2,922	1,383	1,053
Rice	836	814	499	459	491	911	1,774	1,423	1,058	1,029
Upland cotton	1,539	99	685	561	1,132	1,882	3,809	1,868	3,657	1,729
Tobacco	693	-298	-496	-156	376	113	657	386	-95	-96
Dairy	158	4	-98	67	291	480	684	1,140	57	48
Soybeans	-183	77	-65	5	139	1,289	2,840	3,281	3,420	2,352
Peanuts	37	120	100	6	-11	21	35	136	-17	0
Sugar	-24	-3	-63	-34	-30	-51	465	31	-295	-44
Honey	0	-9	-14	-2	0	2	7	23	-3	0
Wool and mohair	211	108	55	0	0	10	-2	38	-1	0
Operating expense <sup>1</sup>	6	6	6	6	5	4	60	5	6	6
Interest expenditure	-17	-1	140	-111	76	210	736	428	228	228
Export programs <sup>2</sup>	1,950	1,361	-422	125	212	165	216	-2,047	649	556
1988-2000 Disaster/tree/ livestock assistance	2,566	660	95	130	3	2,241	1,452	2,326	128	0
Conservation Reserve Program	0	0	2	1,671	1,693	1,462	1,511	1,658	1,821	1,856
Other conservation programs	0	0	7	105	197	292	263	288	286	263
Other	-137	-103	320	104	28	588	858	1,163	1,590	547
Total	10,336	6,030	4,646	7,256	10,143	19,223	32,265	22,105	17,442	11,625
<b>Function</b>										
Price support loans (net)	527	-119	-951	110	1,128	1,455	3,369	3,189	5,303	3,741
Cash direct payments: <sup>3</sup>										
Production flexibility contract	0	0	5,141	6,320	5,672	5,476	5,057	4,105	3,962	3,980
Market loss assistance	0	0	0	0	0	3,011	11,046	5,455	113	0
Deficiency	4,391	4,008	567	-1,118	-7	-3	1	-1	0	0
Loan deficiency	495	29	0	0	478	3,360	6,419	5,293	5,201	2,918
Oilseed	0	0	0	0	0	0	460	921	0	0
Cotton user marketing	149	88	34	6	416	280	446	237	87	4
Other	22	9	61	1	0	1	461	820	18	1
Conservation Reserve Program	0	0	2	1,671	1,693	1,435	1,476	1,625	1,804	1,856
Other conservation programs	0	0	0	85	156	247	215	229	244	217
Noninsured Assistance (NAP)	0	0	2	52	23	54	38	64	156	199
Total direct payments	5,057	4,134	5,807	7,017	8,431	13,861	25,619	18,748	11,585	9,175
1988-2000 crop disaster	2,461	577	14	2	-2	1,913	1,251	1,848	94	0
Emergency livestock/tree/DRAP livestock indemn./forage assist.	105	83	81	128	5	328	201	478	34	0
Purchases (net)	293	-51	-249	-60	207	668	120	-1,310	-1,459	-2,569
Producer storage payments	12	23	0	0	0	0	0	0	0	0
Processing, storage, and transportation	112	72	51	33	38	62	81	122	139	118
Export donations ocean transportation	156	50	69	34	40	323	370	362	320	7
Operating expense <sup>1</sup>	6	6	6	6	5	4	60	5	6	6
Interest expenditure	-17	-1	140	-111	76	210	736	428	228	228
Export programs <sup>2</sup>	1,950	1,361	-422	125	212	165	216	-2,047	649	556
Other	-326	-105	100	-28	3	234	242	282	543	363
Total	10,336	6,030	4,646	7,256	10,143	19,223	32,265	22,105	17,442	11,625

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

4. Estimated in FY 2003 President's Budget which was released on February 4, 2002 based on October 2001 supply & demand estimates. The CCC outlays shown for 1996-2002 include the impact of the Federal Agriculture Improvement and Reform Act of 1996, which was enacted on April 4, 1996, and FY 2000-FY 2003 outlays include the impact of the Agricultural Risk Protection Act of 2000, which was enacted on June 20, 2000. FY 2001 outlays include the impact of the \$5.5 billion of payments mandated by P.L. 107-25.

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

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

## Food Expenditures

**Table 36—Food Sales**

	Annual			2001			Year-to-date cumulative		
	1998	1999	2000	Oct	Nov	Dec	Oct	Nov	Dec
	\$ billion								
Sales <sup>1</sup>									
At home <sup>2</sup>	390.1	407.6	442.4	37.6	38.4	42.4	370.2	408.6	451.1
Away from home <sup>3</sup>	310.4	332.7	359.9	30.6	29.6	32.2	307.3	336.9	369.2
	1998 \$ billion								
Sales <sup>1</sup>									
At home <sup>2</sup>	390.1	400.0	424.4	34.6	35.4	39.1	344.5	379.9	419.1
Away from home <sup>3</sup>	310.4	324.3	341.7	28.0	27.1	29.5	285.4	312.6	342.1
	Percent change from year earlier (\$ billion)								
Sales <sup>1</sup>									
At home <sup>2</sup>	3.9	4.5	8.5	2.9	1.9	-0.2	2.8	2.7	2.4
Away from home <sup>3</sup>	4.4	7.2	8.2	2.7	4.6	7.2	4.4	4.4	4.6
	Percent change from year earlier (1998 \$ billion)								
Sales <sup>1</sup>									
At home <sup>2</sup>	1.6	2.5	6.1	-0.7	-1.6	-2.7	-0.5	-0.6	-0.8
Away from home <sup>3</sup>	1.7	4.5	5.4	-0.4	1.4	4.1	1.5	1.5	1.7

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

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

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

## Transportation

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

	Annual			2001						2002
	1999	2000	2001	Jan	Aug	Sep	Oct	Nov	Dec	Jan
Rail freight rate index <sup>1</sup> (Dec. 1984=100)										
All products	113.0	114.5	116.9	115.9	116.3	116.3	120.6	119.1	118.9	119.9
Farm products	121.7	123.1	124.3	124.8	124.5	124.7	124.6	125.0	124.3	124.9
Grain food products	99.7	100.4	102.8	101.3	103.5	103.4	103.0	103.4	103.0	103.2
Grain shipments										
Rail carloadings (1,000 cars) <sup>2</sup>	24.2	21.8	21.6	23.1	21.4	20.7	26.1	23.1	20.6	22.3
Barge shipments (mil. ton) <sup>3</sup>	3.5	3.1	2.9	1.1	3.9	2.4	2.6	3.9	3.7	1.2
Fresh fruit and vegetable shipments <sup>4</sup>										
Piggy back (mil. cwt)	0.7	0.8	0.8	0.7	0.7	0.7	0.6	0.8	0.6	0.8
Rail (mil. cwt)	1.1	1.4	1.4	1.8	0.9	0.9	1.3	1.7	1.7	1.7
Truck (mil. cwt)	45.2	45.0	44.0	37.9	42.5	37.1	40.9	40.5	41.6	38.2

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

*Information contact: Allen Baker (202) 694-5290*



## Indicators of Farm Productivity

**Table 38—Indexes of Farm Production, Input Use, & 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>**

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	Lbs.									
Red meats <sup>2,3,4</sup>	111.6	113.5	111.3	113.6	113.6	111.1	109.1	113.3	115.1	113.5
Beef	62.9	62.5	61.0	63.0	63.6	64.1	62.7	63.6	64.4	64.4
Veal	0.8	0.8	0.8	0.8	0.8	1.0	0.8	0.7	0.6	0.5
Lamb & mutton	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.9	0.8	0.8
Pork	46.8	49.2	48.5	49.0	48.4	45.2	44.8	48.2	49.4	47.7
Poultry <sup>2,3,4</sup>	58.2	60.5	62.0	62.7	62.1	63.1	63.1	63.7	66.8	66.5
Chicken	44.1	46.5	48.2	48.8	48.2	48.8	49.5	49.8	52.9	52.9
Turkey	14.0	14.0	13.9	13.9	13.9	14.3	13.6	13.9	13.8	13.6
Fish and shellfish <sup>3</sup>	14.8	14.6	14.8	15.0	14.8	14.5	14.3	14.5	14.9	15.2
Eggs <sup>4</sup>	30.0	30.1	30.1	30.3	29.9	29.9	30.2	30.8	32.1	32.2
Dairy products										
Cheese (excluding cottage) <sup>2,5</sup>	25.0	25.9	26.1	26.6	26.9	27.3	27.5	27.8	29.0	29.8
American	11.0	11.3	11.3	11.4	11.7	11.8	11.8	11.9	12.6	--
Italian	9.3	9.9	9.8	10.2	10.3	10.6	10.8	11.1	11.5	--
Other cheeses <sup>6</sup>	4.6	4.7	5.0	5.0	5.0	4.9	4.9	4.7	4.9	--
Cottage cheese	3.3	3.1	2.9	2.8	2.7	2.6	2.6	2.7	2.6	2.6
Beverage milks <sup>2</sup>	220.5	217.2	211.8	211.4	207.2	206.8	203.2	200.5	199.2	194.9
Fluid whole milk <sup>7</sup>	87.1	83.5	79.5	78.0	74.4	73.5	71.4	70.2	70.7	69.8
Fluid lower fat milk <sup>8</sup>	109.6	108.8	105.8	104.9	101.3	100.1	98.1	96.6	96.0	95.1
Fluid skim milk	23.8	24.9	26.5	28.5	31.5	33.2	33.7	33.7	32.5	30.0
Fluid cream products <sup>9</sup>	7.7	8.0	8.0	8.0	8.3	8.6	8.9	9.0	9.5	9.9
Yogurt (excluding frozen)	4.2	4.2	4.2	4.6	5.0	4.8	5.1	5.0	4.9	5.4
Ice cream	16.2	16.2	16.0	16.0	15.5	15.6	16.1	16.3	16.7	16.5
Lowfat ice cream <sup>10</sup>	7.4	7.0	6.9	7.5	7.4	7.5	7.8	8.1	7.5	7.5
Frozen yogurt	3.5	3.1	3.5	3.4	3.4	2.5	2.0	2.1	1.9	1.8
All dairy products, milk equivalent, milkfat basis <sup>11</sup>	564.1	563.0	569.8	580.1	576.6	566.6	567.5	572.8	584.9	593.0
Fats and oils--total fat content	64.6	66.5	69.2	67.3	65.4	64.2	63.7	64.3	67.0	74.5
Butter and margarine (product weight)	14.8	15.2	15.6	14.7	13.6	13.3	12.5	12.6	12.6	12.8
Shortening	22.3	22.3	25.0	23.9	22.2	21.9	20.5	20.5	21.1	23.1
Lard and edible tallow (direct use)	1.8	3.5	3.4	4.2	4.3	4.6	4.0	5.1	5.6	5.9
Salad and cooking oils	26.3	27.1	26.6	25.9	26.5	25.7	28.1	27.3	28.8	33.7
Fruits and vegetables <sup>12</sup>	651.9	677.9	690.1	702.3	690.5	698.1	708.0	699.2	705.4	707.7
Fruit	254.2	282.0	280.8	287.7	282.0	279.0	289.6	284.1	289.8	279.4
Fresh fruits	112.5	122.9	123.6	125.0	122.6	126.1	129.5	128.9	129.5	126.8
Canned fruit	19.7	22.8	20.6	20.7	17.3	18.4	20.1	17.0	19.2	17.4
Dried fruit	12.2	10.7	12.5	12.7	12.7	11.1	10.6	12.1	10.2	10.5
Frozen fruit	3.8	3.9	3.7	3.7	4.2	3.9	3.6	4.1	3.7	3.7
Selected fruit juices	105.5	121.1	120.2	125.1	125.0	119.2	125.2	121.6	126.8	120.6
Vegetables	397.7	395.9	409.3	414.6	408.5	419.1	418.4	415.1	415.6	428.3
Fresh	170.8	174.2	180.8	186.8	180.9	186.0	190.2	186.4	191.9	201.7
Canning	114.0	111.7	112.0	111.2	109.4	107.8	106.0	107.1	103.3	104.7
Freezing	72.4	70.5	75.4	77.6	78.9	83.4	81.6	80.5	81.0	79.7
Dehydrated and chips	32.7	31.4	33.4	30.7	31.0	33.9	32.7	32.5	30.6	33.7
Pulses	7.8	8.1	7.7	8.3	8.3	7.9	7.9	8.7	8.8	8.6
Peanuts (shelled)	6.5	6.2	6.0	5.7	5.6	5.6	5.8	5.8	6.0	5.7
Tree nuts (shelled)	2.2	2.2	2.3	2.3	1.9	1.9	2.1	2.2	2.5	2.5
Flour and cereal products <sup>13</sup>	182.3	184.7	189.3	192.0	190.3	196.3	197.3	196.1	196.9	199.9
Wheat flour	136.6	138.1	142.2	143.0	140.1	146.5	146.9	144.9	144.0	146.3
Rice (milled basis)	16.2	16.7	16.6	18.0	18.7	17.6	18.1	18.3	19.5	19.7
Caloric sweeteners <sup>14</sup>	137.5	140.5	143.4	145.9	148.0	148.5	151.3	152.6	155.0	152.4
Coffee (green bean equiv.)	10.3	10.0	9.0	8.1	7.9	8.7	9.1	9.3	9.8	10.3
Cocoa (chocolate liquor equiv.)	4.6	4.5	4.3	3.8	3.6	4.2	4.0	4.3	4.5	4.7

-- = 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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