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U.S. Corn & Wheat Acreage Decline, While Soybean & Cotton Rise

Planted area for eight major U.S. field crops (corn, soybeans, wheat, barley, sorghum, oats, cotton, and rice) is expected to total 249.9 million acres in 2001, an overall decline of nearly 5 million acres from last year, when prices were higher for most crops at planting time. U.S. farmers—responding to planting delays for corn, relatively high soybean loan rates, and full planting flexibility under the 1996 Farm Act—planted an estimated record 75.4 million acres of soybeans in 2001. Higher expected returns and changes in crop insurance are making cotton more attractive than competing crops. For corn, weaker price expectations and rising input costs may have reduced plantings in 2001 to an estimated 76.1 million acres.

Canada's Subsidized Dairy Exports: The Issue of WTO Compliance

A World Trade Organization (WTO) compliance panel ruled against Canada in July in a dispute over the country's subsidized dairy exports. The ruling represents the third time since May 1999 that the WTO, in response to complaints from the U.S. and New Zealand, has found Canada's dairy export subsidies to be inconsistent with its WTO commitments. Under the WTO Agreement on Agriculture, countries agreed to hold the volume of subsidized exports to specific levels. Canada's dairy exports have exceeded those limits. Canada has announced its intention to appeal the July decision.

U.S. Wheat Supplies To Drop In 2001/02

Despite a strong domestic market for wheat products, U.S. wheat harvested area continues to drop, down more than one-third from its peak in 1981. Adverse weather is expected to push winter wheat harvested area in 2001 to its lowest level since 1988. Sharply reduced wheat production in 2001, combined with lower carryin stocks and only slightly higher

projected imports, will likely drop total wheat supplies to a 5-year low for the 2001/02 marketing year. Low returns relative to other crops, combined with planting flexibility provided under current government programs, have led to the substitution of competing crops for wheat. The low returns to wheat are due largely to lackluster export performance.

How Sweet It Is: Fresh Sweet Corn

Corn-on-the-cob is back. After more than a decade of nibbling, Americans enthusiastically embraced fresh-market sweet corn during the 1990s. U.S. sweet corn demand has trended higher over the past decade, due largely to improved quality, consistency, and marketability. Consumption reached record highs in the 1990s, enticed by new sweeter varieties and value-added packaging. The strong demand, along with rising production and higher shipping-point prices, pushed average crop value up to $456 million. Among the developments supporting further growth in fresh sweet corn consumption will be an increase in off-season demand and the general upward trend in fresh vegetable use.

Development at & Beyond the Urban Fringe: Impacts on Agriculture

Urbanization and development are affecting the nature of U.S. agriculture, particularly at the urban fringe. Development at and beyond the urban fringe is following two routes: incremental expansion of urban areas, and scattered large-lot residential development in rural areas (greater than 1 acre per house). These patterns of development are creating conditions in which a variety of metro farm types coexists, reflecting different adaptations to urban influence.

Farms in metro areas are an increasingly important segment of U.S. agriculture, making up 33 percent of all farms and 18 percent of farmland. While low-density, fragmented settlement patterns can disrupt traditional agricultural landscapes, they do leave room for some agricultural production to continue. However, to adapt to the accompanying rise in land values and the increasing contact with new residents, metro-area farmers may have to alter their operations to emphasize higher value products, more intensive production, and urban marketing savvy.

Dissecting the Challenges of Mad Cow & Foot-and-Mouth Disease

Two animal diseases currently affecting European agriculture—foot-and-mouth disease (FMD) and bovine spongiform encephalopathy (BSE or "mad cow disease")—have made headlines throughout the world. Simultaneous occurrence of these diseases in Britain earlier this year caused confusion and concern among consumers worldwide. The combined costs to the country's economy have been shared by agriculture, consumers, tourism, and trade. Both diseases affect producers and consumers through changes in livestock product prices, availability of goods, and costs of production. Trade is also affected as governments restrict imports from infected countries.

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Field Crops

U.S. Corn & Wheat Acreage Decline, While Soybean & Cotton Rise

Planted area for the eight major U.S. field crops (corn, soybeans, wheat, barley, sorghum, oats, cotton, and rice) is expected to total 249.9 million acres in 2001, an overall decline of nearly 5 million acres from last year, when prices were higher for most crops at planting time. Decreases in corn, oats, barley, and wheat area more than offset increases in sorghum, soybean, cotton, and rice. Acreage harvested for hay crops is expected to expand by almost 4 million, nearly balancing the decline for the major field crops.

Estimates of planted and harvested acreage in USDA's *Acreage* report are based on surveys conducted during the first 2 weeks of June. Compared with USDA's March 31 *Prospective Plantings* report, which indicated farmers' crop intentions for spring plantings in 2001, planted area is 4 percent higher for cotton and 5 percent higher for rice, but 2 percent lower for soybeans and 1 percent for corn.

Yield and harvested acreage for spring-planted crops will be influenced strongly by weather throughout the growing season. Normal weather would result in large output and weak farm prices for most U.S. field crops in 2001/02 (*AO* June-July 2001). However, if additional rainfall does not alleviate dry-weather conditions, crop potential could be reduced in the Plains states, the Gulf Coast region, and the southern Atlantic region.

Planting and fieldwork were ahead of normal this spring in the eastern Corn Belt as drier than usual weather occurred, while rain frequently interrupted progress in the northern and western Corn Belt. Row crop planting in the Upper Mississippi Valley and the northern Great Plains was also delayed this spring. Dry weather prevailed in the Southeast during most of the spring, allowing farmers to complete planting without delay. By mid-May, over 90 percent of U.S. corn acreage had been planted and, as corn planting neared completion, soybean planting accelerated. By the end of May, 80 percent of soybean acreage was planted, compared with 89 percent last year. However, persistent wetness in parts of Minnesota and Iowa prevented farmers from sowing all their intended acreage.

Several factors are behind the rise in ***soybean*** plantings this year, including planting delays for corn and a soybean loan rate (under the government nonrecourse marketing-assistance loan and loan deficiency payment program) that is favorable relative to other crops. Full planting flexibility under the 1996 Farm Act also has allowed U.S. soybean acreage to expand in response to strengthening demand over the last 5 years. U.S. farmers are expected to plant a record 75.4 million acres of soybeans in 2001, a 1-percent increase over last year's record. Planted acreage has increased steadily since 1990 when soybean planted area totaled 57.8 million acres. Farmers are likely to harvest 74.3 million acres, up 2 percent from 2000's record harvested acreage.

Estimated soybean acreage is likely to expand in the Great Plains, Upper Mississippi Valley, Great Lakes states, and Northeast, while declining across the south and southeast states. The largest acreage increases are expected in Illinois, North Dakota, and Iowa. States with large expected reductions include Mississippi, Arkansas, and Louisiana, which are likely to see more cotton acreage.

For ***corn***, weaker price expectations and rising input costs are expected to reduce plantings in 2001 to an estimated 76.1 million acres, down 4 percent from last year. Corn acreage to be harvested for grain is estimated to decrease 5 percent to 69.3 million acres. Total corn acreage of the major producing states (IL, IN, IA, MN, NE, OH, WI), at 50.6 million acres, is expected to be 2 percent lower than last year, due in part to increased soybean plantings (*AO* May 2000). Of these states, Indiana will likely be the only one to boost planted acreage from last year. Outside the Corn Belt, in South Dakota and Texas, corn acreage is expected to drop sharply from last year's high levels. USDA reported that 65 percent of the U.S. crop was in good or excellent condition as of July 16.

Barley plantings will likely be the smallest planted acreage since records began in 1926, decreasing 13 percent in 2001 to an estimated 5.1 million acres. The largest declines are expected in North Dakota and Montana because of extremely dry conditions. Most of the 2001 barley crop was planted by late May. As of mid-July, 57 percent of the crop was in good or excellent condition.

Total ***wheat*** acreage planted for harvest in 2001 is estimated at 59.6 million acres, 5 percent lower than last year. Compared with intentions in the March *Prospective Plantings* report, plantings are down 1 percent for total wheat, 12 percent for durum wheat, and 2 percent for other spring wheat. Producers plan to harvest about 49.3 million acres, a decline of 3.7 million from last year.

Wheat output is projected as the lowest since 1978. *Commodity Spotlight*, page 7

Sorghum plantings are expected to rise in 2001 to an estimated 9.7 million acres, up 6 percent from last year's record-low planted acreage. Kansas, the largest sorghum-producing state, will likely increase plantings 14 percent to 4 million acres, due in part to plantings on abandoned winter wheat land. Texas, with 2.9 million acres, is expected to report the largest reduction, a drop of 100,000 acres from 2000. Sorghum acreage harvested for grain in 2001, at an expected 8.9 million acres, will likely be up 15 percent from 2000.

For ***cotton***, higher expected returns and changes in crop insurance are making the crop more attractive than competing corn and soybeans. Cotton plantings for 2001 are estimated at 16.3 million acres, up an expected 5 percent from 2000 and 4 percent above the March *Prospective Plantings* report. Larger expected acreage

in the Delta and southeastern states should more than offset declines in the southwest and western states. Prospects for a large U.S. crop have contributed to the recent rapid decline in cotton prices.

Texas, the largest cotton-producing state, completed most plantings by late June. In mid-July, 33 percent of the Texas crop was rated in good or excellent condition and 30 percent in fair condition. California's planting began in mid-March but was slowed by cool, wet weather in early April. Although some fields had to be replanted because of April storms, cotton development in California is near normal, with 100 percent of the crop in good or excellent condition as of mid-July.

Higher expected prices for long-grain ***rice*** are responsible for much of the anticipated increase in rice acreage. Rice plantings for 2001 are estimated at almost 3.3 million acres, likely up 6 percent from 2000, with long-grain acreage up an estimated 19 percent. In contrast, combined short- and medium-grain plantings are expected down nearly 7 percent—with Arkansas likely accounting for the bulk of the decrease—due to weaker prices in 2000. AO

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Livestock, Dairy, & Poultry

U.S. Meat Exports To Grow Modestly

Modest growth in overall red meat and poultry exports is expected this year and in 2002. Beef and pork exports are likely to exhibit a mixed pattern, while broiler exports are expected to increase. Disease problems—bovine spongiform encephalopathy (BSE) and foot-and-mouth-disease (FMD)—in the European Union (EU) disrupted meat trade this year, but some EU countries have recently been designated FMD-free by major meat importers.

Since 1997, U.S. meat exports have grown at an average annual rate of about 4 percent, compared with double-digit growth in the previous 10 years. During the boom of the early 1990s, trade agreements made several meat markets more accessible—such as Korea, Japan, Mexico, and Canada—and many countries experienced increased income growth. Also, growth rates in the early 1990s were particularly noteworthy because they followed years of low exports.

Recent slower growth in meat exports can be traced to a healthy U.S. economy with consumers bidding to keep meat in the U.S., increased competition from other meat exporting countries, and economic uncertainties in some key importing markets (Russia and Asia).

Despite a 2-percent decline in U.S. beef supplies and marginally higher prices, U.S. beef exports (primarily fed beef) are expected to rise about 4 percent in 2002, compared with a 5-percent decline in 2001. The increase is based on two factors: economic growth stimulating demand in major beef markets, and limited supplies from South America and the EU because of FMD and BSE considerations. Of the major exporting countries, only Canada is expected to have substantially higher supplies available for export next year.

U.S. beef imports (primarily processing beef) are on track to be up about 1 percent in 2001 and 2002 as cow slaughter continues to decline. Higher beef prices and the strong dollar will provide incentives for Australia and New Zealand to export to the U.S. Exports from Argentina and Uruguay will be limited due to FMD problems that preclude shipments of fresh/chilled and frozen beef.

Live cattle exports are expected to drop from the record 481,000 head in 2000 to 410,000 in 2001. Exports are expected to decline another 9 percent in 2002 as lower U.S. feeder cattle supplies and record high U.S. prices limit Canadian imports of feeder cattle. Canada, as a result of changes to the protocol of the Restricted Feeder Cattle Project (RFCP), has surpassed Mexico as the dominant market for exports of live cattle. RFCP was designed to allow export of U.S. feeder cattle from designated states to Canadian feedlots from mid-October through mid-March without unacceptable risk of carrying bluetongue and anaplasmosis.

After reaching the highest level in 5 years in 2000, cattle imports are likely to rise to 2.325 million head in 2001 and drop back to 2.175 million in 2002. Cattle imports have been quite variable historically, but increased 11 percent between 1996 and 2000. Growing imports from Mexico more than offset declining imports from Canada. Imports from Mexico are up because of increasingly attractive feeder cattle prices in the U.S. and genetic improvements in Mexican feeder cattle. Live cattle imports from Canada are down as changes in Canadian policy have encouraged cattle feeding, slaughter capacity has expanded, and Canada began rebuilding herds.

U.S. pork exports are forecast at roughly 1.44 billion pounds for this year and drop to 1.4 billion in 2002. Major U.S. export markets will continue to be Japan (50 percent), Mexico (20 percent), and Canada (10 percent).

The 2001 forecast for pork imports is 956 million pounds, down from 2000 because of the 10-week ban on imports from the EU due to the FMD outbreak. Resumption in imports from Denmark likely will boost imports in the second half of the year. U.S. pork imports are forecast at about 1 billion pounds in 2002.

The trend toward higher U.S. imports over the past 5 years is a reflection of the expanding Canadian pork industry and its growing integration with the U.S. industry. The integration is likely to continue, with Canada's share of U.S. imports eroding Denmark's share. In 2000, Canada accounted for 76 percent of U.S. pork

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imports, Denmark 15 percent. By comparison, Canada's share of U.S. imports was 49 percent in 1990, while Denmark's share was 30 percent.

Integration of the North American pork industry is also apparent from the Canadian perspective. Last year, the U.S. accounted for 90 percent of Canadian pork imports; in 1990, the U.S share was 80 percent. However, Canada remains a net pork exporter to the U.S. In 2000, the U.S. imported 595 million pounds more pork on a carcass-weight basis than it exported to Canada.

U.S. live hog imports are forecast at 4.7 million head for both 2001 and 2002, compared with 4.36 million head in 2000. Canada's feeder pig export sector is growing while a hog-finishing sector has been developing in U.S. Corn Belt states. Continuing expectations for low feed prices also are contributing to the higher forecast. First-quarter 2001 live hog imports from Canada were over 1.2 million head, 58 percent of which were feeder animals.

The increase in broiler exports to Russia and Hong Kong in 2000 and the first quarter of 2001 will likely continue into 2002. In 2002, U.S. broiler exports are expected to be about 6.2 billion pounds, up nearly 5 percent from the projected exports for 2001. If the 2002 production and export forecasts are realized, exports will account for about 20 percent of domestic broiler production.

U.S. turkey exports in 2002 are expected to total 495 million pounds, up slightly from 2001. The largest customers (Mexico and Russia) are expected to have continuing economic growth. AO

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Livestock, Dairy, & Poultry

Dissecting the Challenges of Mad Cow & Foot-and-Mouth Disease

Two animal diseases currently affecting European agriculture—foot-and-mouth disease (FMD) and bovine spongiform encephalopathy (BSE)—have made headlines throughout the world. Simultaneous occurrence of these diseases in Britain earlier this year caused confusion among consumers worldwide about the issues and interrelationships, and the combined costs to the UK economy have been shared by agriculture, consumers, tourism, and trade.

Both diseases affect producers and consumers through changes in livestock product prices, availability of goods, and costs of production. Trade is also affected as governments restrict imports from FMD- and BSE-infected countries to protect human health, animal health, and domestic livestock industries. The U.S. has a vested interest in the trade aspects of animal health issues worldwide, as U.S. exports of cattle, sheep, hogs, and their products account for about $6-$10 billion, or roughly 10 percent of the value of U.S. farm-level cash receipts for these species.

Bovine Spongiform Encephalopathy

BSE, also called mad cow disease, is a neurological disease in cattle that was first discovered in Britain in 1986. BSE peaked in British cattle in 1993, and initially it was thought BSE affected only cattle. However, in 1996, the British government announced a possible link between BSE and a new human variant of Cruetzfield-Jacob Disease (nvCJD), and BSE also became a human health/food safety issue.

BSE and its human form, nvCJD, are always fatal. The human version of BSE is thought to be acquired by consuming certain beef or other products from infected cattle. Because nvCJD appears to have an incubation period spanning several years, it is not known if its incidence has peaked in humans.

The United Kingdom (UK)—of which Britain is a part—has been disposing of BSE-infected cattle since 1986, with indemnity payments to farmers and adverse effects on beef production, consumption, and market prices. Cow herds infected with BSE are quarantined and killed, but neighboring farms are not at risk unless their cattle are also fed infected feed. The 1996 outbreak was followed by an immediate 40-percent drop in sales of beef products and a 26-percent drop in household consumption of beef and veal. Total first-year losses to BSE were estimated at £740- £980 million (US$1.07-$1.4 billion). The longrun effect on shares of expenditures on beef and veal in the UK are estimated to be a 4.5-percent drop.

Since its discovery in 1986, over 30 hypotheses have been offered for BSE's origin, but the exact cause remains unknown. The lead hypothesis points to rogue proteins (prions) in meat and bone meal produced from sheep infected with scrapie, a related neurological disease. The prions are then thought to be passed on to cows fed this infected meal, causing BSE in cows, and the disease is spread by feeding other cattle prion-infected meat and bone meal produced from infected cows. There is no evidence that BSE spreads through contact between unrelated adult cattle or with other species.

BSE has been confirmed in native cattle in over a dozen other countries, although over 95 percent of all BSE cases have occurred in the UK. There have been no confirmed cases of BSE or nvCJD in the U.S.

Foot-and-Mouth Disease

In February 2001, FMD, a highly contagious viral livestock disease, broke out in the UK. The outbreak added to the economic burden of BSE by setting off an additional series of livestock dispositions, indemnities, and effects not only in the agricultural sector, but in tourism and other sectors as well, because of restrictions on travel and animal movement. FMD primarily affects cloven-hoofed

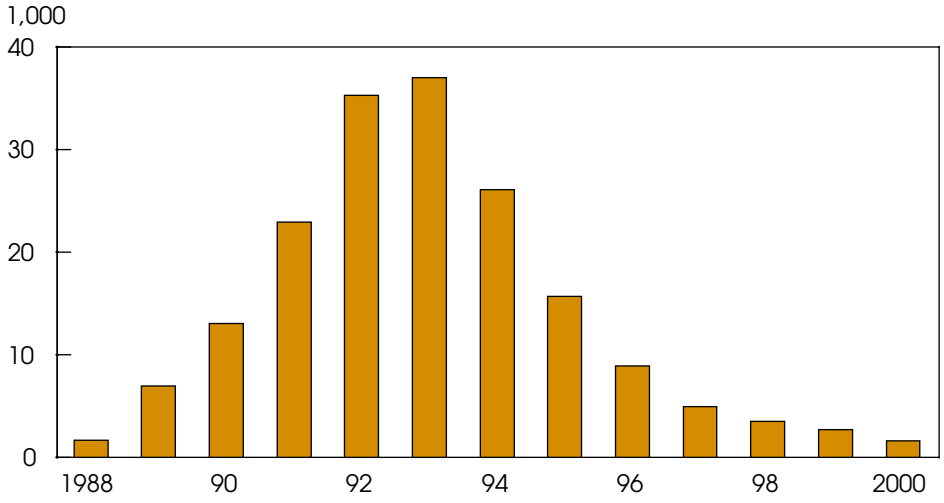
FMD and BSE Differ for Animals and Humans

	Foot and mouth disease (FMD)	Bovine spongiform encephalopathy (BSE)
Animal cases to date (UK)	Over 3 million head; 1,500 farms to date in 2001 UK outbreak	177,812 head; 35,158 farms to date
Food safety issues	No	Yes
Human infections to date	40 infected worldwide	Approximately 100 worldwide
Animal health threat to trading partners	Yes	Yes
Contagion to animals	High, through many modes of transmission	Yes, possibly through prion-infected meat and bone meal
Cause	Virus	Possibly prions[1]
Estimated costs to UK economy	US$3.6-$11.6 billion[3]	US$5.8 billion[2]

1. Prions are rogue proteins in meat and bone meal produced from BSE-affected cattle. 2. Cumulative gross budgetary cost of BSE to the United Kingdom (UK) between March 1996 and March 31, 2000 was roughly £3.5 billion (US$5.05 billion) and is expected to total £4 billion (US$5.8 billion) by March 31, 2001, according to personnel from the UK Department for Environmental, Food, and Rural Affairs. 3. PricewaterhouseCoopers estimates that overall economic impacts of the current FMD outbreak to the UK will total between £2.5 and £8 billion (US$3.6 to $11.6 billion).

Economic Research Service, USDA

Confirmed BSE Cases Among Britain's Cattle Peaked in 1993



2000 data as of March 12.
Source: Ministry of Agriculture, Fisheries, and Food, UK (now the Department for Environmental, Food, and Rural Affairs).

Economic Research Service, USDA

animals, such as cattle, sheep, elk, and deer, and can significantly reduce meat and milk production.

Unlike BSE, FMD is not usually fatal to livestock, and consumption of the meat from infected animals is not considered a food safety issue. There have only been around 40 documented cases of FMD infection in humans worldwide to date—none in the current outbreak. All human cases have been mild and are thought to be due to ingesting unpasteurized infected milk, contact with the airborne virus, or direct contact with infected animals.

Meat from FMD-infected livestock does not pose food safety risks because biochemical changes during processing and cooking destroy the virus. FMD does, however, affect meat and dairy supplies and trade status. Infected or exposed livestock are quarantined and killed, reducing supplies of livestock products. As of July 9, 2001, more than £91 million (US$63 million) in claims had been paid to UK producers. Livestock on farms within the quarantine areas that have not been infected can still be consumed within the quarantine area. Domestic supplies of livestock and livestock products in countries with FMD may even increase as international trading partners ban importation of these products. However, local shortages may appear due to restrictions on animal movement. Only live animals and fresh meat products are banned. Cooked, sealed meat products are not included in the ban.

FMD is very difficult to control. It has occurred in almost every country of the world at some point in history and is endemic in Africa, Asia, and most of South America. Vaccination can help stem an outbreak, but it is not totally effective and jeopardizes export markets—vaccinated animals can be FMD carriers and are thus banned from international commerce. Whether or not to vaccinate susceptible animals against FMD is a key policy issue faced by countries with FMD and by their trading partners.

Impacts & Implications

BSE and FMD vary in their potential as threats to producers and consumers and in their reach regarding the number of animals and people each affects. Around the world, FMD has affected more animals than BSE.

Both FMD and BSE affect livestock product prices in producing and consuming countries because of the effect of disease-response policies on supplies and trade. Prices for livestock and livestock products have declined in the short run in the UK because of BSE and FMD.

Unlike FMD, BSE has very serious implications for human health and food safety. In terms of numbers, nvCJD is known to have caused about 100 human deaths (97 in the UK, 2 [possibly 3] in France, and 1 in the Republic of Ireland as of March 30, 2001). About 40 FMD infections in humans have been documented worldwide, though none have been confirmed

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in the current outbreak and none were serious illnesses. BSE is a more severe animal illness than FMD, as it is invariably fatal.

The economic impact of these two animal diseases varies considerably. The UK Department for Environmental, Food, and Rural Affairs (formerly the Ministry of Agriculture, Fisheries, and Food) estimates costs of BSE to the UK at over $5 billion to date. Economic effects of the recent FMD outbreaks on the British economy and its European Union neighbors have affected agriculture, food consumption, trade, and tourism all over Europe. PricewaterhouseCoopers estimates the range of economic impacts to the UK from £2.5 to £8 billion (US$3.6 to $11.6 billion), or between 0.3 and 0.8 percent of GDP.

Surveillance programs and strict import restrictions are in place to prevent FMD and BSE from entering the U.S. Surveillance costs in the U.S. for all agricultural products are reflected in budgets for the Agriculture Quarantine Inspection Program amounting to $278 million for FY 2001 and $296 million for FY2002. However, it is difficult to separate surveillance costs for BSE and FMD from costs for other diseases.

Measures to prevent occurrence of BSE include regulations limiting the type of feed that can be fed to ruminants, like cattle and sheep. Ruminant feed cannot contain animal protein derived from mammalian tissues. U.S. production of meat and bone meal was just under 4.2 billion pounds in 2000, which was worth about $360 million. Prices for substitute protein supplements, such as soybean meal, are likely to increase as producers reduce feeding of meat and bone meal. Other uses will have to be found for meat and bone meal not used for feed, or disposal methods will need to be devised.

The U.S. has been free of FMD since 1929, when the last of nine outbreaks was eradicated. BSE has never been detected in the U.S. On May 24, 2001, the President signed into law the Animal Disease Risk Assessment, Prevention, and Control Act of 2001 (PL107-9). The Act calls for establishment of a Federal interagency task force to coordinate actions among Federal agencies to prevent the outbreak of BSE and FMD in the U.S. The task force will report to Congress on coordination of interagency activities. It will also report publicly available sources of Federal government information on the diseases, and any immediate needs for additional legislation to prevent the introduction of BSE and FMD. AO

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Upcoming Reports—USDA's Economic Research Service

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

August

10 World Agricultural Supply and Demand Estimates (8:30 a.m.)
*13 Cotton and Wool Outlook (4 p.m.)***
*Oil Crops Outlook (4 p.m.)***
*Rice Outlook (4 p.m.)***
*14 Feed Outlook (9 a.m.)***
*Wheat Outlook (9 a.m.)***
*20 Agricultural Outlook**
27 Foreign Agricultural Trade of the United States (FATUS)/ U.S. Agricultural Trade Update
*29 Livestock, Dairy, and Poultry Outlook (4 p.m.)***
31 Outlook for U.S. Agricultural Trade

*Release of summary, 3 p.m.
**Available electronically only

***Agricultural Outlook* in the months ahead...**

- The use of antimicrobial drugs in animals
- Brazil, Argentina, and agricultural competitiveness
- U.S. food price outlook for 2002
- Commodity spotlights on soybeans, rice, and cotton

Commodity Spotlight

Agricultural Research Service, USDA

U.S. Wheat Supplies To Drop In 2001/02

Despite a strong domestic market for wheat products, U.S. wheat harvested area continues to drop, down more than one-third from its peak in 1981. Moreover, adverse weather is expected to push winter wheat harvested area in 2001 to its lowest level since 1988. Low returns relative to other crops, combined with the planting flexibility provided under current government programs, have led to the substitution of competing crops for wheat. The low returns to wheat are due largely to lackluster export performance. U.S. wheat exports have shown little increase since 1996/97, as U.S. share of the global wheat market continues to erode, dipping in 1999/2000 to the lowest in three decades, and barely increasing in 2000/01 and 2001/02.

2001/02 Production To Fall Below Last Year

U.S. wheat harvested area for 2001 is projected at 49.3 million acres, down 3.7 million acres from last year. Wheat yields are also projected to be down from last year because of adverse weather in some areas—40 bushels per acre compared with 41.9 bushels. Total U.S. wheat production is projected at only 1,974 million bushels, the lowest since 1978.

Sharply reduced wheat production, combined with lower carryin stocks and only slightly higher projected imports, will likely drop total wheat supplies to a 5-year low of 2,942 million bushels for the 2001/02 marketing year. Domestic use is projected to be down 43 million bushels from last year's 1,325 million bushels, as projected feed and residual use declines more than food use increases. Feed and residual use is 60 million bushels lower, with weak corn prices and large corn supplies expected to keep wheat feeding in check. Population growth is expected to increase food use by 10 million bushels.

Because total projected use (including exports) exceeds projected production plus imports, ending stocks are forecast to drop to 610 million bushels for the 2001/02 marketing year. This represents a decline of 263 million bushels from 2000/01 and 340 million bushels from the recent peak in 1999/2000. Consequently, the farm-gate price is projected to rise in 2001/02, ending up in the range of $2.70 to $3.30 per bushel. By comparison, the season-average prices for the 2000/01 and 1999/2000 marketing years were an estimated $2.62 and $2.48. Higher prices will allow a larger percentage of the nation's wheat producers to cover their costs (see box).

With reduced U.S. wheat supplies and expected higher U.S. wheat prices, exports are projected to decline. Wheat exports in 2001/02 are projected to be 1.05 billion bushels, compared with 1.065 billion bushels a year earlier.

Both Winter & Spring Wheat Production Down

U.S. winter wheat production, forecast at 1,366 million bushels in 2001, is 197 million bushels or 13 percent below 2000 and the lowest since 1978. The U.S. winter wheat yield is forecast at 43.2 bushels per acre, down 1.4 bushels from last year's 44.6. Harvested area totals 31.7 million acres, down 10 percent from 2000. This harvested area is the lowest since 1933.

Winter wheat production in most states will decline from a year ago. The largest projected declines are in Kansas, Oklahoma, South Dakota, and Washington. Texas is an exception, with production projected to recover from last year's poor crop as both harvested area and yields rise.

Hard red winter (HRW) is the largest U.S. wheat class. HRW harvested area is projected to be 21.4 million acres, down 9 percent from a year earlier. Dry conditions, which delayed seeding and slowed emergence last fall, was the leading cause of lower acreage. In Texas and Oklahoma, excessive rainfall followed dry conditions and further hindered planting. Summer drought in Montana continued into the fall, leading many farmers to reduce their planted acreage. Despite the weather, yield is forecast up 0.8 bushel per acre nationally. However, because of the acreage decline, total production will likely be down 62 million bushels in 2001.

Soft red winter (SRW) harvested area is down 13 percent from last year to 7 million acres. Nationally, various weather problems have reduced estimated SRW yields 7 percent below last year, even though Missouri, Kentucky, and Tennessee now expect record yields. SRW production is forecast at 380 million bushels, 91 million below a year ago.

Projected white winter (WW) wheat harvested area totals 3.3 million acres, down just 2 percent from 2000. Yields, however,

are estimated to be down 16 percent because of dry conditions in the Pacific Northwest. WW production is forecast at 204 million bushels, 44 million bushels lower than last year.

Spring wheat production, excluding durum, is forecast at 513 million bushels, down 37 million bushels from 2000. Harvested area is up slightly, but yields are down 9 percent overall and off sharply in Idaho, Minnesota, and the Pacific Northwest states.

U.S. durum production is forecast at 94 million bushels, down 16 million bushels from last year. Continued disease problems and the cancellation of a lucrative crop insurance option help explain the reduced area. Durum yields are projected to average 31.6 bushels per acre, down slightly from last year.

World Wheat Production To Drop

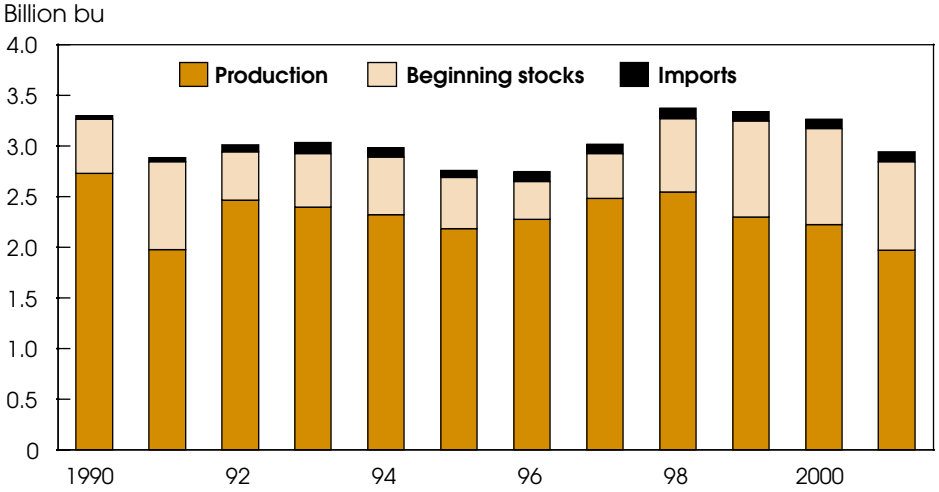
Global wheat production is forecast down almost 11 million tons to 568 million in 2001/02. However, most of the drop is in the U.S., with foreign production down less than 4 million tons. Wheat crops in many countries have critical growing stages still ahead, so weather and other factors are likely to modify production estimates.

Production by major competing exporters is expected to be lower, mostly because European Union (EU) prospects are down 9 million tons from a year earlier. Excessive rains across parts of Spain, France, and the entire United Kingdom (UK) prevented normal wheat planting in the fall of 2000. UK wheat area is forecast down 19 percent, with smaller but significant declines in France and Spain. Adverse weather conditions continued into the early summer in some areas, and EU yields are forecast down 3 percent from last year.

Increased production prospects in Argentina and Australia will offset about one-fifth of the EU drop. Dryness in some parts of Australia limited planted area, and wheat production is forecast up only 0.3 million tons as yields in some regions return to trend after last year's drought. Larger planted area is expected to raise Argentina's wheat production 1.5 million tons.

Canada is expected to expand area slightly, as indicated in official planting surveys, despite weather problems. Late spring dryness hampered early growth in western Saskatchewan and Alberta, while excessive rainfall plagued Manitoba and parts of eastern Saskatchewan. Canada's 2001/02 wheat production is projected down nearly 2 million tons compared with last year.

Lower U.S. Wheat Output Pulls Down Supply Level



2001 forecast.

Economic Research Service, USDA

In China, May was the hottest and driest in the last 20 years across much of the North China Plain. Wheat was mostly in the filling stage and suffered, although irrigation limited losses. Also, relatively low wheat price supports led farmers to plant smaller area. The adverse conditions are expected to drop China's production to 96 million tons, down almost 4 million tons from a year earlier and the lowest in 10 years.

India and Pakistan are not expected to match the previous year's record production because of dryness and limited irrigation supplies. India's production is forecast down 10 percent, or nearly 8 million tons in 2001/02, while production in Pakistan is expected to drop over 2 million tons. Wheat production in the Middle East is forecast to increase only slightly from last year's drought-reduced level. While some countries, like Syria, received more rain than a year earlier, others, like Turkey, saw conditions worsen. Drought persisted in parts of North Africa as well, while some parts of the region, like northern Morocco, received better rains. North Africa is forecast to increase production by more than 2 million tons from last year's low level.

Countries of the former Soviet Union are expected to harvest a wheat crop of over 75 million tons, which is up more than 11 million tons from the previous year. Much of the increase is due to expanded plantings and improved growing conditions in Ukraine, but also to increased production in Russia. Eastern Europe has more moisture in some countries, especially in the North, while drought has persisted in parts of Romania and Bulgaria. The drought limited Eastern Europe's rebound to 4 million tons from last year's drought-induced level of 28 million tons.

Foreign Use Grows & World Ending Stocks Decline

Foreign wheat consumption is projected to increase more than 5 million tons to 558 million tons in 2001/02. Foreign food use is expected to increase over 1 percent, but less than population growth. Total wheat consumption is expected to expand the most in India and the former Soviet Union, while declining in the EU, China, and Canada. Wheat consumption in North

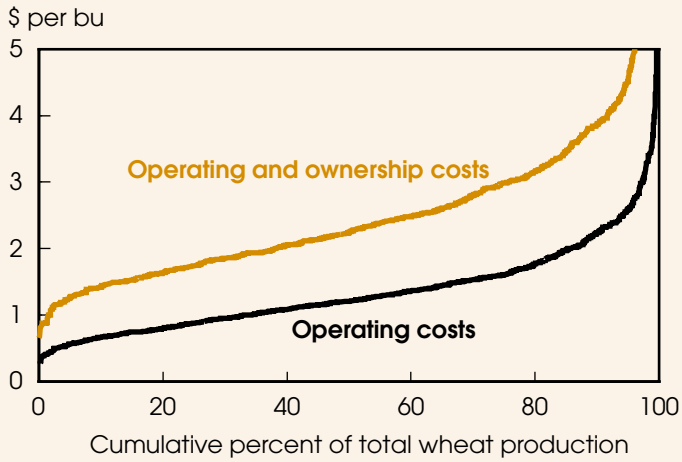
Production Costs Vary Widely

Farmers who grow annual field crops, such as wheat, decide each year what mix of crops to plant. Annual production decisions are usually based on whether the grower expects the price received for the crop to cover operating costs, including seed, fertilizer, chemicals, fuel, custom operations, repairs, and interest on operating inputs. Longer term decisions on continuing to raise the crop will consider whether or not expected prices over several years will cover both operating and ownership costs. Ownership costs are mainly the costs of maintaining the capital stock used in production, including costs for asset depreciation, interest, taxes, and insurance.

Production costs for wheat vary considerably across the nation. A cumulative distribution of operating costs for 1998 reveals, for example, that farmers produced 50 percent of the wheat crop at $1.20 per bushel or less; 75 percent at $1.60 per bushel or less; and 90 percent at $2.25 per bushel or less. For operating and ownership costs, the cumulative distribution indicates that 50 percent of the 1998 wheat was produced at $2.25 per bushel or less; 75 percent at $3 per bushel or less; and 90 percent at $3.90 per bushel or less.

The fact that 90 percent of wheat was produced at an operating cost of $2.25 per bushel or less in 1998 helps to explain why U.S. wheat growers continue to plant wheat despite the low prices of recent years. During the past four crop years, the farm-level price for all wheat averaged $2.79 per bushel, ranging from a low of $2.48 in 1999/2000 to a high of $3.38 in 1997/98. However, for many farmers, prices do not cover both operating and ownership costs. Farmers cannot continue to grow wheat over several years if they cannot cover ownership costs and thus replace capital stock as it deteriorates. Also, these costs do not include opportunity costs for owned resources, which may also affect the longrun decision about producing wheat (opportunity costs include foregone earnings from alternative uses of land and farmers' labor).

Wheat Production: Distribution of Operating and Ownership Costs, 1998



Economic Research Service, USDA

Many producers have continued to grow wheat despite low farm-level prices because of the impact of government payments. Loan deficiency payments and marketing loan gains added about $0.19 per bushel to gross returns for the 1998 wheat crop. Also, many wheat producers received flexibility contract payments and emergency assistance that may have helped cover some of wheat's production costs.

For further information on commodity costs and returns, contact Mir Ali (202) 694-5558 or William McBride (202) 694-5577 or visit the ERS web site at http://www.ers.usda.gov/Data/CostsAndReturns.

Africa and the Middle East is forecast to change little.

Slow consumption growth combined with continued reductions in production are expected to reduce global wheat stocks by almost 25 million tons in 2001/02. This is the largest decline (16 percent) in global wheat stocks since 1986/87, when U.S. stocks plummeted with implementation of the 1985 Farm Act. In 2001/02, foreign wheat stocks are projected down 18 million tons, with most of the drop in China. Competing major exporters' stocks are forecast down over 2 tons. India's stocks are forecast down 3 million tons as production drops, consumption increases, and subsidized exports continue. However, Indian Government stocks are expected to remain above target levels.

China's Government does not publish estimates of grain stocks. In the past, USDA's independent estimates of stocks performed well as an indicator of conditions in China's grain market. Recently, however, new information from China's first agricultural census, official statements, and evidence from trade and price patterns indicate that stocks are larger than USDA previously estimated. There is little indication of tightness in China's wheat market, even though output and stocks have declined. The stock estimates have been revised to more accurately reflect grain supply and use in China.

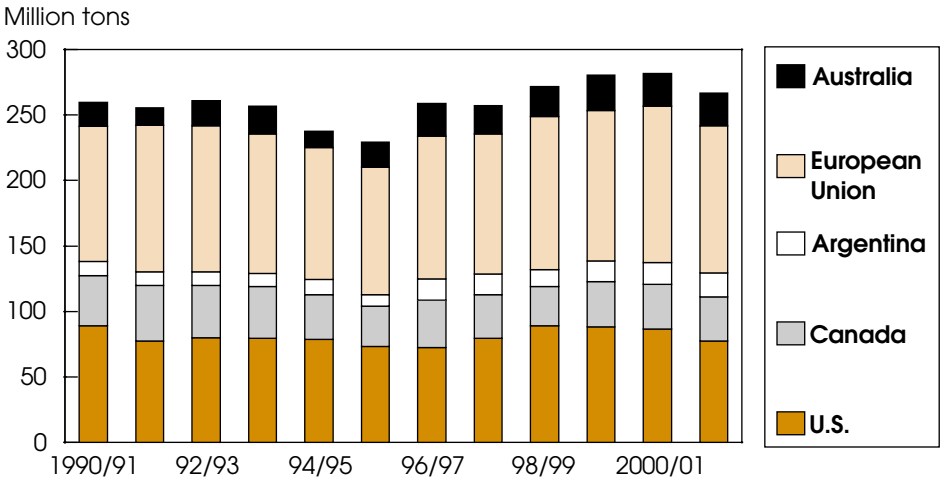
World Wheat Trade Forecast Up, U.S. Exports Down in 2001/02

World wheat trade in 2001/02 is projected to reach 107 million tons (excluding intra-EU trade), up 4 million tons from the previous year's level, but 5 million less than in 1999/2000.

Many of the largest importers are not expected to increase purchases. Brazil's imports are forecast to decline 0.3 million tons to 7.3 million, because of increased production and stagnant demand. Iran is projected to maintain imports at 7 million tons despite a modest increase in production, as stocks are low after several years of drought. Egypt's wheat imports are expected to increase slightly to 6 million

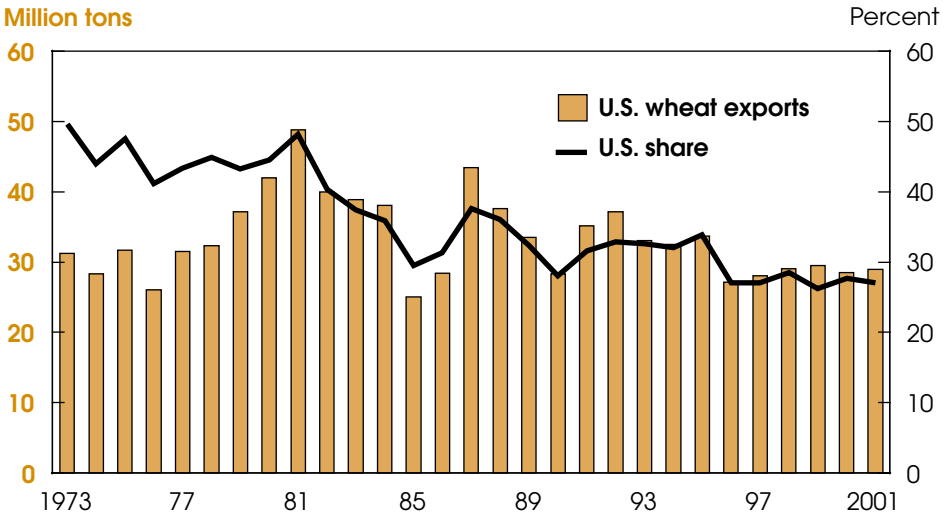
Commodity Spotlight

Supplies of Major Wheat Exporters Down 2001/02 but Still Large



2001/02 projected. Supplies based on sum of production and beginning stocks.
Economic Research Service, USDA

U.S. Share of World Wheat Trade Has Fallen



2001 projected. Excludes intra-EU trade.
Economic Research Service, USDA

tons, but remain well below the 1998/99 peak of 7.4 million tons because of increased production and flat consumption. Japan's imports are also forecast down slightly to 5.8 million tons, with consumption declining slightly. Eastern Europe and the former Soviet Union are forecast to reduce imports by 1 million tons and 0.4 million tons, respectively, because of increased production.

Many importers are expected to increase imports by a small amount in 2001/02. China is projected to increase imports by 1.5 million tons because of reduced production, lower stocks, and a preference for imported wheat for blending. Pakistanis likely to increase imports 0.5 million tons as production drops. Lower production will help boost Mexico's imports by a forecast 0.4 million tons. More use of wheat for feed is expected to boost imports by South Korea and the Philippines by 0.5 million tons each, and Israel by 0.2 million tons. The EU is forecast to import 0.3 million tons more for blending. Indonesia is expected to boost imports 0.3 million tons because of expanding consumption.

Exporters' Supplies To Keep A Lid on Prices

Exporters are forecast to have sufficient supplies to satisfy increased demand, but prices are expected to rise as supplies are less abundant. Large production in Canada, Australia, and Argentina is expected to boost their 2001/02 wheat exports by a combined 2.5 million tons. India, Ukraine, and Eastern Europe are expected to boost exports of relatively low-quality wheat by nearly 4 million tons.

The EU is expected to reduce exports 1.5 million tons because of lower production. The Grain Management Committee of the European Commission is likely to be concerned with ensuring stable internal prices, and thus will limit exports. Exports by Turkey and Pakistan are also expected to decline because of reduced production.

U.S. exports are forecast up 0.5 million tons to 29 million in 2001/02. Tight wheat supplies are expected to keep U.S. prices relatively high, shifting importers' purchases to other sources and reducing the U.S. share of world wheat trade to 27 percent (excluding intra-EU trade), the second lowest in three decades. AO

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China's grain industry: structure, operation, & prospects

...in an upcoming issue of *Agricultural Outlook*

Commodity Spotlight

USDA photo: Bill Tarpenning

How Sweet It Is: Fresh Sweet Corn

Corn-on-the-cob is back. After more than a decade of nibbling, Americans enthusiastically embraced fresh-market sweet corn during the 1990s. Consumption reached record highs in the 1990s enticed by new sweeter varieties and value-added packaging. This strong demand, combined with rising production and higher shipping-point prices, pushed average crop value up 81 percent between 1988-90 and 1998-2000 to $456 million.

Sweet corn is a member of the Gramineae (grass) family (as are wheat, barley, and rice) and a native of the tropical Americas. It is a subspecies of the genus *Zea* (species *mays*) that has been a staple crop in Central and South America for thousands of years. Sweet corn is actually a genetic mutation of field corn and was reportedly first grown in Pennsylvania in the mid-1700s, with the first commercial variety introduced there in 1779. The natural mutation in sweet corn causes the kernel to store more sugars than field corn. Ironically, this mutation may have been considered a nuisance for centuries as it interfered with the storability of field corn.

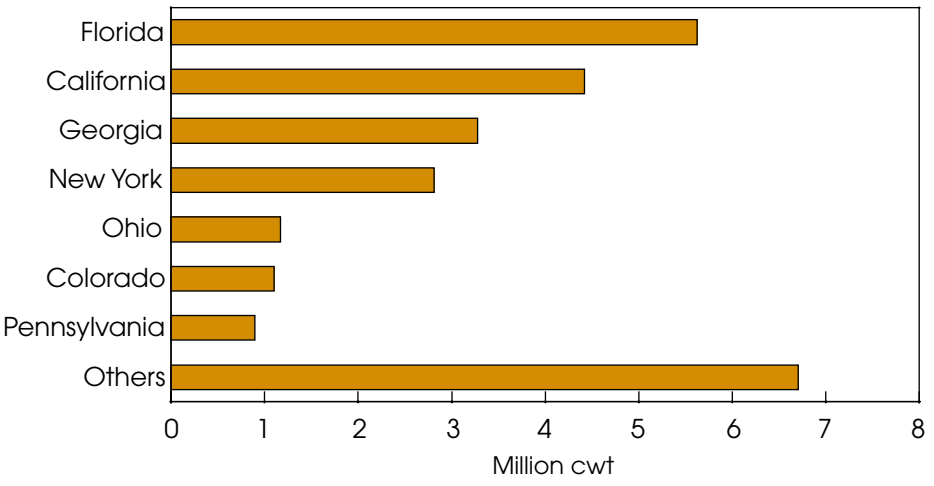
Sweet corn is harvested before it matures, while the sugar content is still high. Most varieties of sweet corn feature kernels that are yellow (most popular), white, or bicolor (a combination resulting from cross-pollination). Florida growers favor yellow varieties (due to buyer demand) while California growers are increasingly favoring white varieties. Although there may be regional consumer preferences for corn color, sweetness is not related to color.

Today, most sweet corn varieties fall into one of three genetic types—normal sugary, sugary-enhanced, and supersweet. The sugary enhanced hybrids are sweeter than the older cultivars, but the supersweets, which now predominate, are even sweeter and offer extended shelf life.

Because sugar content is maintained longer, sweet corn can be more easily shipped long distances while maintaining peak marketability. The supersweet varieties introduced (and refined) over the past 15 years allow corn to hold optimal quality for at least 10 days, twice that of other types. Supersweets have been around for several decades, but until the late 1980s failed to catch on with most growers because of poor germination and very low yields in varieties available at that time.

In the U.S., sweet corn is produced for three distinct markets—fresh, canning, and freezing. These markets largely operate independently, with separate supply, demand, and price characteristics. The canning market is the largest in terms of total acreage and production, accounting for 37 percent of each. However, like broccoli, carrots, and other dual-use (fresh and processing) vegetables, the fresh market accounts for the majority (two-thirds) of total sweet corn crop value.

Florida: Leader of the Pack in Fresh Sweet Corn Production



Average fresh-market sweet corn production during 1998-2000.
Source: National Agricultural Statistics Service, USDA.

Economic Research Service, USDA

Commodity Spotlight

Corn by Any Other Name, Not as Sweet

The words "sweet corn" or "corn-on-the-cob" summon images ranging from a festive summer barbecue to Yankee pot roast or clam bakes. Sweet corn is one of several types of corn, which also includes flint corn, dent corn (yellow and white), popcorn, flour corn, and pod corn.

White (dent) corn is largely used to make foods such as grits and various breakfast cereals. Blue corn, popular in Mexican foods and health food stores, is a type of flour corn used for colorful tortillas, corn chips, and cereals. Baby corn—a processed product largely imported due to extensive hand harvest requirements—consists of immature field or sweet corn varieties (some developed specifically for baby corn production) harvested a day or two after the silks appear on the ear, while the cob is small and tender.

Flint corn, also called Indian corn, can be very colorful and is largely ornamental in the U.S. Some colorful ornamental corn cultivars are produced from miniature popcorn varieties, which may even sport colorful leaves and stalks. Although used mostly for livestock feed, yellow (dent) corn in the milk stage has a sweet flavor and can be consumed like sweet corn. Through the mid-1900s, this sweet "green corn" was marketed as "roasting ears" in parts of the country, while traditional sweet corn was marketed as sugar corn.

Fresh Market Is Seasonal

In 2000, area harvested for fresh-market sweet corn reached a record high 246,900 acres and production was second only to the 1998 high. During 1998-2000, Florida was the leading producer of fresh-market sweet corn with 22 percent of the U.S. crop. California (17 percent), Georgia (13 percent), and New York (11 percent) are also leading producers. Sweet corn for processing is grown primarily in Wisconsin, Minnesota, Washington, and Oregon.

Production of fresh-market sweet corn is highly seasonal, reflecting both past production trends and consumption habits. Peak volume occurs during July, with 60 percent of total marketings in May-August. Although shipments peak around July 4, they are also strong around the Memorial Day holiday—typically the start of the picnic and vacation season.

Movement during the winter quarter (January-March) accounts for only about 10 percent of annual volume, with the majority supplied by Florida and supplemented by imports from Mexico. Increased winter movement during the 1990s largely reflects both better marketing (largely prepackaged ears of corn) and the adoption of newer varieties with longer shelf life. These varieties have proven popular with consumers and retailers and could help further expand the domestic market by fostering off-season demand.

In addition to using varieties that maintain tenderness and sweetness over an extended period, fresh-market growers and shippers have taken other steps to enhance product quality and marketability. Because sugar in the kernel is converted to starch as corn matures, harvest timing is critical. The conversion of sugar to starch is more rapid at higher temperatures, so corn is moved quickly from fields to special coolers where field heat is removed by vacuum (cold air) cooling, hydrocooling (cold water), and/or package icing.

Once harvested (mostly by hand), fresh sweet corn has a relatively narrow market window, which varies greatly with variety and the temperature at which it is held. Sweet corn must be shipped to market in refrigerated transports soon after harvest. If harvested too late or left uncooled for a couple of days, it can be bland, tough, and tasteless.

Fresh-Market Prices Trending Higher

Shipping-point prices for fresh-market sweet corn (unadjusted for inflation) tied the 1995 record high of $18.30 per cwt during the 2000 season, up 22 percent from 1990. After adjusting for inflation, the season-average price received by growers in 2000 was about the same as in 1990 and in the early 1960s. Unlike the canning and freezing corn markets, which almost exclusively feature contract pricing between growers and processors, most fresh sweet corn is priced on the daily spot market.

During the 1990s, monthly fresh sweet corn shipping-point prices trended upward until mid-1996 when prices slumped slightly. This pause in the price trend, which continued until 2000, was likely the result of uneven increases in supplies as shippers sought to meet an expansion of market demand. As supply and demand evened out in late 1999 and into 2000, market prices resumed their upward trend. Retail prices are not reported for sweet corn.

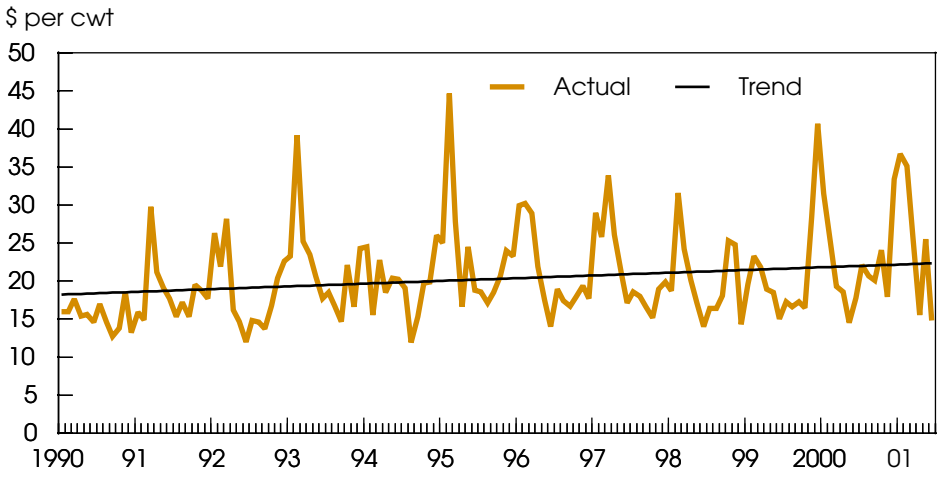
Despite recent increases in production and imports during the cooler months of the year, interseasonal price patterns have been constant for the past two decades. Prices begin to decline in March before falling off sharply in April when production in central Florida begins to flow to market. Prices continue to decline through the seasonal low in June before July 4 holiday demand slightly increases average prices. As supplies become available from more states during the summer, prices settle at low levels through September. Then as cool weather and frost ends production in all but southern states, prices climb and fluctuate through the end of the year.

Trade Increasing, But Still Small

World trade has traditionally been a minor part of the U.S. fresh sweet corn market. The U.S. leads the world in sweet corn exports and is a net exporter of fresh sweet corn, shipping twice the volume imported. During 1998-2000, the U.S. exported 4 percent of production while importing just 2 percent of the sweet corn consumed domestically.

With the strong dollar, higher consumption of fresh vegetables, and lower (or phased out) import tariffs, import volume averaged 180 percent higher in the 1990s than during the 1980s. Sweet corn imports have continued to grow, with 2000 volume more than double the average of the

U.S. Sweet Corn Prices Peak in Winter



Nominal monthly shipping-point prices.
Source: National Agricultural Statistics Service, USDA.
Economic Research Service, USDA

1990s. Mexico provided 92 percent of fresh sweet corn imports during 1998-2000, with the majority arriving during the winter (December to April).

On the export side, growth has slowed over the past two decades. Volume during the 1990s averaged 77 percent higher than in the 1980s, but 2000 exports were just 14 percent above the 1990s average. Canada received 84 percent of U.S. fresh sweet corn exports during 1998-2000, with the United Kingdom a distant second at 5 percent. The majority of exports occur before the Canadian crop is harvested (between April and July), with peak volume in May and June.

Consumption Trend Sweetens

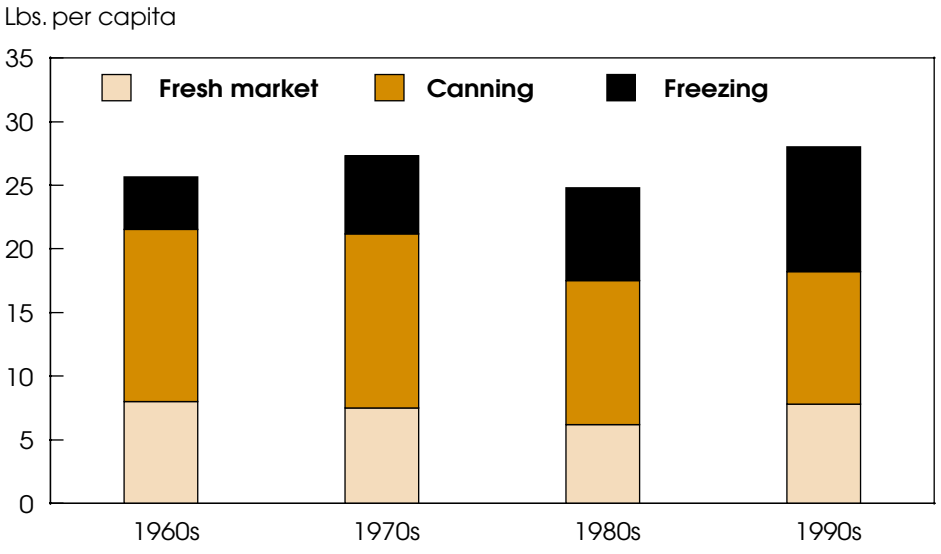
U.S. sweet corn demand has trended higher over the past decade due largely to improved quality, consistency, and marketability. According to *Fresh Trends, 2001* (Vance Publishing), 87 percent of surveyed consumers rate taste as the top attribute in purchasing fresh produce. Product appearance is also important. Therefore, the late 1980s introduction of husked and trimmed ears in attractive tray packs (many microwaveable) may have boosted the appeal of sweet corn. Retailers may also be more interested in sweet corn, given the extended shelf life of supersweet varieties and more sophisticated handling and packaging at the shipping point, each of which help to reduce retail shrinkage and improve customer satisfaction.

Rising consumption over the past decade is due in large part to the success of the fresh sweet corn industry in providing an improved product. Domestic consumption of fresh sweet corn averaged 2.6 billion pounds during 1998-2000—up 62 percent from 1988-90. In fact, consumption of sweet corn has been rising since the early 1920s. Per capita use of fresh sweet corn trended up from the early 1920s to the late 1940s before flattening out at around 8 pounds into the mid-1970s. Demand then began to wane and bottomed out at about 6 pounds in the mid-1980s as inconsistent quality, increased away-from-home eating, and the desire for more convenient foods chipped away at demand.

Meanwhile, demand for frozen sweet corn accelerated in the 1980s and into the 1990s as consumers found frozen corn faster and more convenient to prepare (especially in the microwave). Frozen corn also held important advantages in consistent quality and taste. The fresh sweet corn industry responded to this challenge in the late 1980s and 1990s. Shippers began offering convenience and "curb appeal" in the form of tray-pack corn. At the same time, seed companies released new supersweet hybrids that dramatically boosted quality. During 1998-2000, per capita use of fresh sweet corn averaged 9.3 pounds—up 48 percent since 1988-90 and the highest since records began in 1919.

On a fresh-equivalent basis, sweet corn consumption is divided equally among fresh, frozen, and canned. According to USDA's *1994-96 Continuing Survey of*

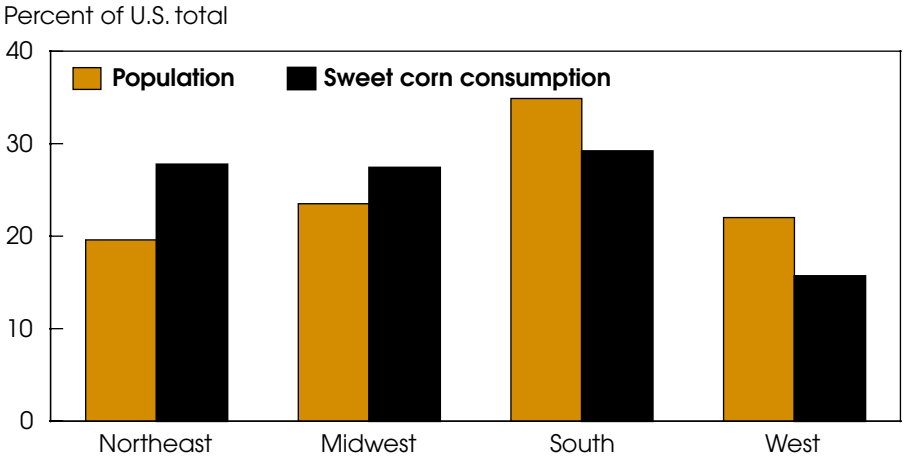
Sweet Corn Consumption Was Record High in the 1990s



Fresh-weight basis.
Economic Research Service, USDA

Commodity Spotlight

Fresh Sweet Corn Is Most Popular in Northeast and Midwest



Derived from the Continuing Survey of Food Intake by Individuals, 1994-96; Agricultural Reseach Service, USDA. Regions defined by Census Bureau.

Economic Research Service, USDA

Food Intakes by Individuals, fresh sweet corn, like most other foods, is largely purchased at retail for home consumption (87 percent). The small percentage used in foodservice may largely reflect the difficulty and labor intensity of handling and preparing fresh sweet corn in a restaurant environment. Labor is the single largest expense in most foodservice operations, and that alone heavily favors the use of prepared frozen and canned corn products.

Relative to onions, peppers, and celery, sweet corn in fresh form offers somewhat limited culinary options. Most fresh-market corn-on-the cob is boiled, steamed, baked, or grilled. Canned and frozen sweet corn is less labor intensive and offers a wider range of culinary options, including soups, chowders, fritters, casseroles, relishes, salads, and succotash.

In the away-from-home market, U.S. consumers most often eat sweet corn in standard "white tablecloth" restaurants. Shippers of both fresh and processed sweet corn have been unable to find a substantial niche in the expanding fast-food market, which is responsible for less than 4 percent of fresh sweet corn consumption and less than 2 percent of canned and frozen corn.

Regionally, people in the Northeast and Midwest eat more fresh-market sweet corn than do consumers in other areas of the country. Northeasterners consumed twice as much per capita as did people in the West in 1994-96. Lower sweet corn consumption in the West may reflect both the influence of the Hispanic population (who eat fresh sweet corn sparingly) and the West's status as the national leader in fast food and other restaurant spending—places where sweet corn is not well represented.

Consumers in suburban areas, where 47 percent of the U.S. population resided at the time of the 1990 Census, consumed nearly 60 percent of all fresh sweet corn. About a third of all Americans resided in metro areas, but they consumed only about one-fifth of fresh sweet corn. Preferences along racial lines indicate that 86 percent of all fresh-market sweet corn was eaten by non-Hispanic White consumers (who accounted for 73 percent of the population in the 1990 Census).

The survey results also suggest a positive correlation between income and fresh sweet corn use. Consumers in the survey's top income bracket reported the highest per capita consumption and those in the lowest bracket reported the lowest consumption.

Men age 40-59 (12 percent of the population) consumed the largest share of fresh sweet corn (21 percent), while women of the same age also consumed slightly more fresh sweet corn than their share of the population. Surprisingly, people under age 20 account for 29 percent of the population but consumed only 20 percent of fresh sweet corn.

Many consumers equate corn-on-the-cob with outdoor barbecues and casual warm-weather dining. However, these perceptions could be changing as consumers vary their diets during cooler months to include summer favorites like sweet corn. A combination of increasing off-season demand, the general upward trend in fresh vegetable use, and industry interest in assembling a research and promotion program should help support further growth in fresh sweet corn consumption. AO

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Corn Smut: A Profitable Delicacy

Corn smut is a common fungus found largely on sweet corn throughout the world. In most areas of the U.S., smut is not a major threat to the viability of the corn crop. Some U.S. sweet corn growers actually hope to find smut in their fields. In Mexico, immature smut galls are consumed as an edible delicacy known as cuitlacoche. Especially prized in fresh form (it is largely sold canned), sweet corn smut galls have reportedly become a money-making product for a few sweet corn growers who sell them to Mexican restaurants.

Thomas McDonald

Development at & Beyond The Urban Fringe: Impacts on Agriculture

Land development in the U.S. is generally following two routes: expansion of urban areas and large-lot development (greater than 1 acre per house) in rural areas. In the past decade, this proliferating development has been tagged with the unflattering epithet of "urban sprawl."

Both kinds of growth affect the amount and productivity of U.S. agricultural land. They also create problems due to greater costs for infrastructure like roads and sewers, as well as increased traffic congestion and energy used for transportation. Sprawl can impose higher costs on local communities for services, degrade the environment, clutter landscapes, interrupt open space, and erode the sense of community in formerly rural areas. Concerns about development around urban areas are not new, having arisen periodically during most of the last century, and certainly since automobile ownership became widespread after World War II.

Land-use changes flow from population growth, household formation, and economic development. Metro areas (see box) have expanded as rural people moved off farms and residents of densely populated central cities dispersed to surrounding suburbs. Growth has spilled out of urban areas as population disperses to rural parts of metro counties and previously rural nonmetro counties. Investments in infrastructure—such as roads, sewers, and water supplies—have enabled this dispersion. New retail, office, warehouse, and other commercial development follows in the wake of new housing development, to serve the new population and to employ the relocated labor force.

Urban area, as measured by the Census Bureau, despite doubling since 1960, still made up less than 3 percent of U.S. land area in 1990 (excluding Alaska). Developed area—which includes urban area and land used for transportation—made up 5 percent in 1997, as measured by USDA's National Resources Inventory (NRI).

While the increase in urban area poses no immediate threat to overall U.S. food and fiber production, some crops in some areas are particularly vulnerable to development. For example, 61 percent of U.S. vegetable production is located in metro areas. Land used for winter vegetables in Florida, California, and Arizona could be developed because the climate in those states also attracts population.

U.S. agriculture can adapt to urban development by changing the products and services offered. While low-density, fragmented settlement patterns can disrupt traditional agricultural landscapes, they do leave room for some agriculture production to continue. Farms in metro areas are an increasingly important segment of U.S. agriculture, making up 33 percent of all farms, 18 percent of farmland, and a third of the value of U.S. agricultural output. However, to adapt to rising land values and increasing contact with new residents, metro-area farmers may have to change their operations to emphasize higher value products, more intensive production, and urban marketing savvy.

What Is Sprawl?

The U.S. General Accounting Office has concluded that there is no widely accepted definition of sprawl. Definitions range from the expansive…

> "When you cannot tell where the country ends and a community begins, that is sprawl. Small towns sprawl, suburbs sprawl, big cities sprawl, and metro areas stretch into giant megalopolises—formless webs of urban development like Swiss cheeses with more holes than cheese." (U.S. House of Representatives, 1980)

…to the prescriptive:

> "…a spreading, low-density, automobile-dependent development pattern of housing, shopping centers, and business parks that wastes land needlessly." (Pennsylvania 21st Century Environment Commission).

Most definitions have some common elements, including:

- low-density development that is dispersed and uses a lot of land;
- geographic separation of essential places such as work, homes, schools, and shopping; and
- almost complete dependence on automobiles for travel.

Metro, Urban, & Rural Geography

Statistics describing trends in land use are based on geographic entities defined by the Census Bureau or the USDA National Resource Inventory (NRI).

Metro area (Census)—a core area containing a large population nucleus, together with adjacent communities that have a high degree of economic and social integration with that core. Metro areas are defined in terms of entire counties (except in New England, where towns are used) and contain a mix of land uses, ranging from the densest urban core to suburban landscapes to deserts, farms, and forests.

Urban area (Census) comprises all territory, population, and housing units located in "urbanized areas" (continuously built-up areas with a population of 50,000 or more with a central core), defined in terms of Census tracts (not counties), and in "urbanized places" (places of 2,500 or more inhabitants outside urbanized areas). Places not classified as urban are ***rural***.

Urban fringe consists of rural areas in metro counties. The part of the fringe existing nearest to existing urban areas is likely to grow the fastest and eventually be absorbed when densities rise to urban levels.

Urban and built-up areas (NRI) consists of residential, industrial, commercial, and institutional land; construction and public administrative sites; railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage plants, water control structures, small parks, and transportation facilities with urban areas. Due to differences in data collection techniques and definitions, NRI estimates of "urban and built-up areas" are usually higher than Census "urban area" estimates for nearly all states.

Developed land (NRI) consists of urban and built-up areas and land devoted to rural transportation, which includes highways, roads, railroads, and right-of-way outside urban and built-up areas.

Without a consensus definition, any growth in suburban areas may be accused of sprawling. Short of a return to dense urban living not widely seen since before World War II, it is not clear how growth can be accommodated without incurring the worst features of sprawl.

Two Kinds of Growth

Regardless of how sprawl is defined, government officials, housing consumers, farmers, and other interest groups appear concerned about two kinds of growth:

At the urban fringe. The urban "fringe" is that part of metro counties not settled densely enough to be called "urban." New roads, commercial buildings, and low-density housing (two or fewer houses per acre) cause urban areas to grow farther out into the countryside, increasing the density of settlement in formerly rural areas.

Beyond the urban fringe. Another kind of development occurs farther out in the rural countryside, beyond the edge of existing urban areas in metro counties and often in adjacent nonmetro counties. Instead of relatively dense development of four to six houses per acre, exurban development consists of scattered single houses on large parcels (often 10 acres or more). This type of development is more likely to remove land from agricultural production and changes the nature of open space, but is not "urban."

Growth at the edge of existing developed areas gradually changes into more fragmented developments farther into the countryside, so there is no clear geographic dividing line between the two kinds of growth. While related, these two forms of growth have different causes and consequences, especially for agriculture and the environment.

Total "urban area," as defined by the Census Bureau, has more than doubled over the last 40 years from 25.5 million acres in 1960 to 55.9 million acres in 1990. Urbanized areas alone increased by a factor of 2.5, from 15.9 million acres in 1960 to 39 million acres in 1990. The next estimate of urban area will be issued by the Census Bureau next year, based on the 2000 population census.

"Urban and built-up areas" in USDA's NRI include those measured by the Census Bureau, as well as developed areas as small as 0.25 acre outside urban areas encompassing some, but not all, large-lot development. NRI urban and built-up area increased from 51.9 million acres in 1982 to 76.5 million acres in 1997, averaging 2.2 million acres per year. "Developed land" defined by NRI also includes the area in rural roads, railroad corridors, and other transportation-related parcels. By this definition, developed area grew from 73.2 million acres in 1982 to 98.3 million acres in 1997 (roughly the size of Ohio).

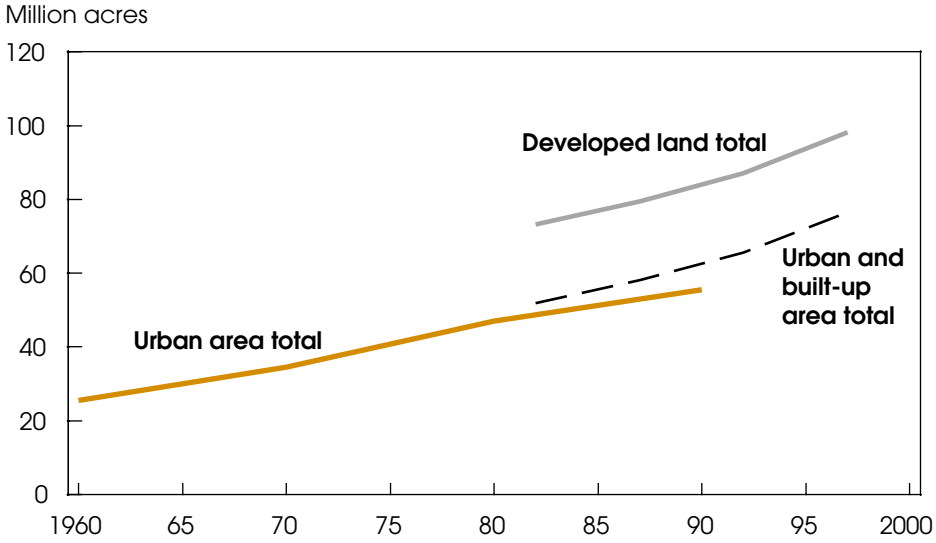
Growth in area used for housing has risen steadily throughout the last century, driven by large-lot development. Since at least 1970, growth in large-lot development appears to have accelerated in periods of prosperity and declined during recession. Houses on lots greater than 1 acre accounted for 35 percent of new housing construction in 1994-97, but occupied 88 percent of new area devoted to housing. Lots greater than 10 acres were only 5 percent of new construction, but comprised 60 percent of the land in new housing constructed between 1994 and 1997.

In addition to the trend toward larger lots for individual houses, much of the land for newly constructed housing in recent years is in nonmetro areas. Only about 16 percent of the acreage used by houses built between 1994 and 1997 is in existing urban areas within metro areas, as defined by the Census Bureau. An additional 5 percent is on farms in nonmetro areas. Thus, nearly 80 percent of the acreage used for recently constructed housing—about 2 million acres—is nonmetro land that is not part of existing farms. Almost all of this land (94 percent) is in lots of 1 acre or larger, with 57 percent on lots 10 acres or larger.

Farming in the City's Shadow

Growing areas of U.S. agriculture are influenced by urbanization and development. Metro areas contain 20 percent of U.S. land area and 80 percent of the U.S. population. In 1997, farms in metro areas made up a third of all farms and controlled 39 percent of farm assets. (Excluded from the farm count are service firms, such as horse boarders and landscape services that

Two Kinds of Growth: Urban Area Expansion Continues as Development Also Occurs Beyond Urban Fringe



Development beyond the urban fringe is the difference between urban area and developed land total. Developed land includes urban and built-up (developed areas of 0.25 acres or more) plus areas in roads and other transportation.
Source: Urban area data from the U.S. Census; developed land and urban and built-up area data from the National Resource Inventory.
Economic Research Service, USDA

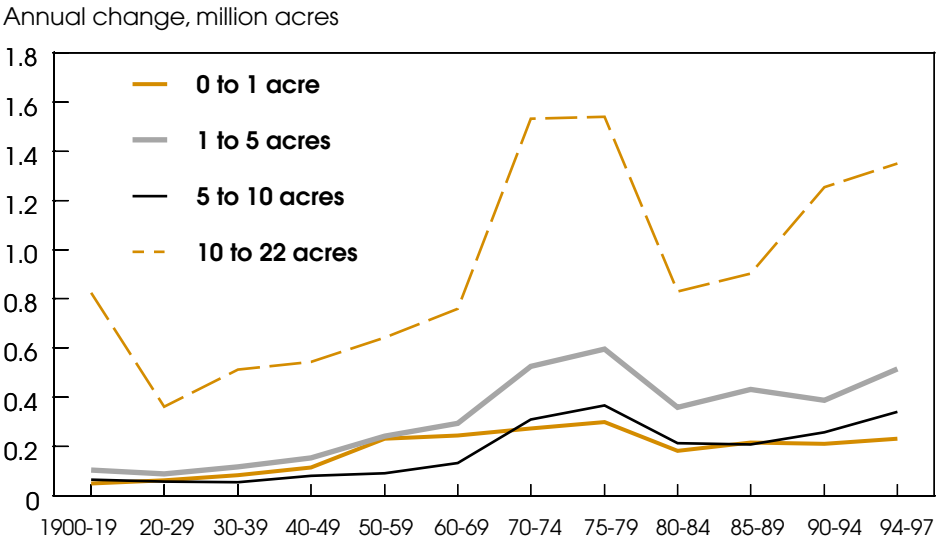
are not directly involved in agricultural production but that also contribute to open space and economic activity.) Metro farms are generally smaller than nonmetro farms, produce more per acre, have more diverse enterprises, and are more focused on high-value production.

Growth and development create conditions in which a variety of metro farm types coexist, reflecting different adaptations to urban influence. Change occurs not only in product and input markets where farmers buy and sell, but also in the actions of local government institutions, which by law and tradition exercise control over property taxes and land use.

As urbanization proceeds, farmers may seek enterprises and markets that offer returns to land that approach returns from development, in part to offset higher property taxes that reflect the potential for nonagricultural development. Initially, this may involve new crops and innovative marketing techniques. High-value crops—such as fresh fruits, vegetables, herbs, and dairy products—can be sold through restaurants and gourmet grocery outlets or directly to consumers in farmers' markets, roadside stands, or U-pick operations. At some point, successfully ***adaptive farmers*** may become more general rural entrepreneurs, expanding their activities beyond farming. Some may sell off less productive woodlots and pastureland, concentrating on more intensive production on remaining cropland. Other, more ***traditional farmers*** may attempt to maintain traditional crops and practices, some merely waiting for the perceived inevitable sale for development. And some farms will go out of business, with the land remaining idle or divided and sold to developers or ***recreational*** (hobby and part-time) ***farmers***, whose primary use of the land is as a residence.

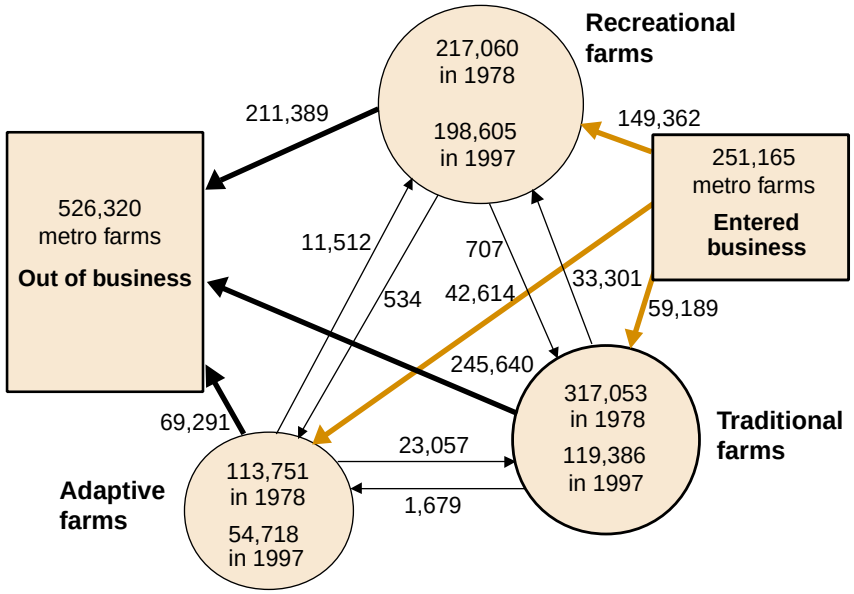
In the 1990s, traditional farms accounted for a third of metro farms, operated 71-77 percent of metro farm acreage, and controlled more than 40 percent of assets, sales, and net cash farm income. Recreational farms made up about half of metro farms, controlled 30 percent of farm-sector assets and equity, and operated 14-17 percent of the land. Recreational farms have little viability as economic enterprises. Adaptive farms accounted for 13-14 percent of metro farms and operated 9-12 percent of metro farm acreage, but they controlled more than their proportional share of metro farm sales, assets, and net cash farm income. These are the farms that have the best chance of continuing under urbanization.

Large Lots Dominate Land Used for Housing, Especially During Economic Booms



Source: ERS analysis of American Housing Survey, 1997 data.
Economic Research Service, USDA

Metro Area Farms Have Taken a Variety of Business Paths Over Two Decades



Recreational farms are part time with low sales. Adaptive farms have changed to more diverse and higher value production. Traditional farms continue past production patterns.
Source: ERS analysis of 1978 to 1997 Census of Agriculture microdata.

Economic Research Service, USDA

Farm Survival in Metro Areas

Longitudinal data from Censuses of Agriculture (1978-97) were used to follow metro farms existing in 1978 through time. Virtually all metro farms classified as recreational in 1978 were out of business (ceased having sales or sold to another farmer) by 1997, regardless of geographic location. Likewise, more than three-fourths of the 1978 traditional farms had left the business by 1997.

Adaptive farms were much more likely than either recreational or traditional farms to survive the two decades. In the case of adaptive farms, the percentage leaving business varied substantially by geographic area, with farms farther from the metro core less likely to go out of business. Thus, adaptive farms generally have a survival advantage over recreational or traditional farms in urban or metro areas, but they survive better where there is less development.

Although the 20-year survival rates were fairly low for all farm categories in metro counties, they were similar to those for businesses in general. Furthermore, the fact that individual farms may go out of business does not mean that farms and their land disappear into subdivisions. Metro areas also saw many new farm businesses, utilizing existing agricultural land, during the period.

Working Landscapes & Rural Amenities

The different types of metro farms and their turnover rates have implications for programs to preserve open space held by farms. While purchase of development rights, "smart growth" policies (*AO* April 2001), and other efforts to preserve farm *land* from development may succeed, keeping the land in active farming enterprises may be more difficult. Some farmers are selling development rights to Federal, state, local, and nongovernmental farmland protection programs. As of April 2001, state and local farmland protection programs have purchased development rights on over 1.06 million acres of farmland.

Adaptive farms are the most likely to survive as farms. Programs to preserve farmland through commercial farming may have minimal impact on traditional and recreational farms, because these farms have difficulty generating enough revenue to resist development.

At the extreme, urbanization brings about the local extinction of farming as an economic activity and as a working landscape. However, some farming activities benefit from greater proximity to urban population—fruit, vegetable, and nursery operations, for example, where transportation costs are high and products are perishable. Unplanned growth makes the rural-to-urban transition more difficult than it might otherwise be because the pattern of development is more haphazard and less certain than development guided through planned growth.

Farming activities adapted to urbanizing areas can provide rural amenities that are profitable for farmers and attractive to the surrounding population. Inevitably, these activities differ from those that went before, and may involve changes in ownership as traditional farmers may not embrace the transition. Different kinds of products and services are produced, in different ways, for markets that are suited to an urbanizing environment. How permanent these adaptations can be in the face of development and how much and in what ways public support for these amenities should be provided are questions yet to be answered. AO

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Special Article

Canada's Subsidized Dairy Exports: The Issue of WTO Compliance

A World Trade Organization (WTO) compliance panel ruled against Canada in July in a dispute over the country's subsidized dairy exports—the first case before a WTO panel involving export subsidy provisions under the WTO-administered Agreement on Agriculture. Canada has already announced its intention to appeal the decision.

Under the Agreement on Agriculture, countries that employed agricultural export subsidies agreed to hold the volume of subsidized exports to specific levels. If Canada loses its appeal, a WTO arbitrator will determine the annual level of harm to the economies of the U.S. and New Zealand caused by the subsidized exports. Following that determination, both countries could increase tariffs on Canadian imports.

The panel's ruling was the latest development in a longstanding dispute. The ruling represents the third time since May 1999 that the WTO, in response to complaints from the U.S. and New Zealand, has found Canada's dairy export subsidies to be inconsistent with its WTO commitments.

Changes in Canadian Dairy Policy

The Canadian dairy sector has functioned under a complex supply management framework since the early 1970s. This framework consists of four elements: domestic production and marketing controls, import controls, administered pricing, and direct government payments to producers. Direct government payments are being gradually reduced and will be eliminated in 2002 in favor of higher administered prices.

Domestic production and marketing controls are intended to match supply with estimated demand at the administered price. Milk production is classified as either fluid (for table milk and cream) or industrial (for butter, cheese, milk powders, ice cream, yogurt, etc.). Fluid milk is generally consumed within the producing province, while industrial milk products move across provincial boundaries or are exported. Provincial marketing boards govern the production and marketing of fluid milk within their own borders. Marketing of industrial milk, on the other hand, is carried out under concurrent Federal and Provincial legislation.

Each year, the Canadian Milk Supply Management Committee forecasts demand for industrial milk and sets the national production target or Market Sharing Quota (MSQ). It then assigns a portion of the MSQ to each province based largely on historical shares. In contrast, each province sets its own production target or quota for fluid milk based on local demand. The two quotas--industrial and fluid--are then allocated by each provincial marketing board to its respective producers, according to its own policies and regional pooling agreements. Dairy quotas, which were initially distributed at no cost, are now auctioned on the

Agriculture and Agri-Food Canada

open market and have become an extremely valuable asset for producers.

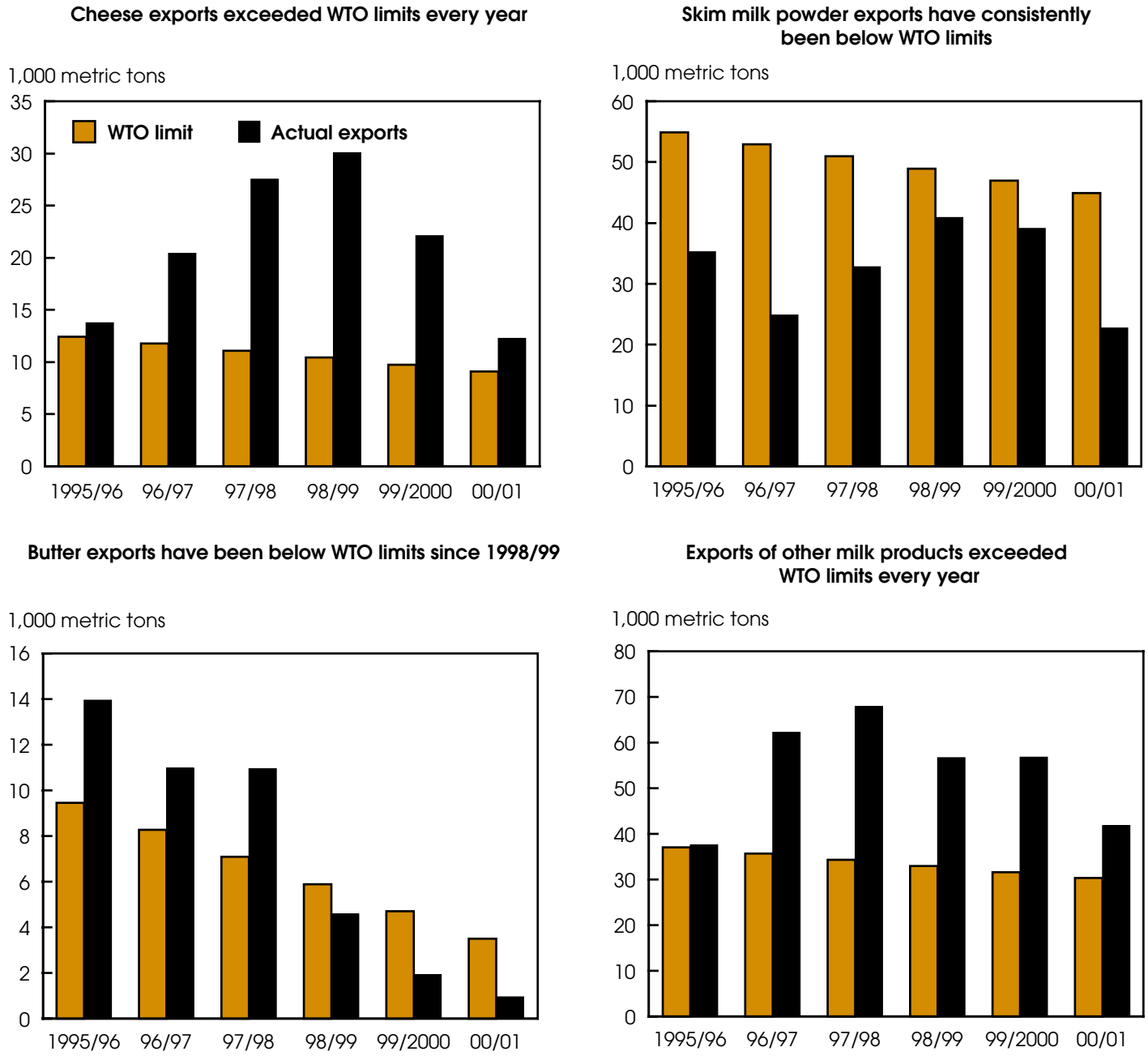
Dairy imports are restricted through a system of tariff-rate quotas (TRQs). These allow imports of up to 5 percent of total domestic consumption to enter Canada at a low duty. Imports above these limits are subject to prohibitively high duties: as much as 299 percent for butter, 246 percent for cheese, and 202 percent for skim milk powder. These compare with duty levels in the U.S. ranging from 42 to 69 percent.

Milk production quotas combined with import restrictions allow Canada to maintain a protected domestic market and a system of administered prices. For industrial milk, the Canadian Dairy Commission (CDC) annually sets a target price based on cost-of-production surveys and other market considerations. The CDC supports the target price when necessary by purchasing butter and skim milk powder. Actual prices paid for industrial milk by processors are determined by provincial agreements, with reference to the target price, and depend on end use. The price paid by processors for fluid milk is generally higher than the price for industrial milk. Fluid milk prices are based on provincial cost-of-production estimates, subject to adjustments negotiated between marketing boards and processors to reflect market factors in addition to production costs.

Following implementation of the Agreement on Agriculture in 1995, Canada was not expected to increase dairy exports since its domestic prices were above world prices and its WTO commitments constrained the quantity of dairy products it could export with subsidies. However, in August 1995, Canada adjusted its national dairy policy by replacing export levies collected from producers with a new permit system that allowed Canadian

Special Article

Canadian Dairy Exports Frequently Exceeded WTO Limits for Subsidized Sales Since 1995/96



August to July marketing year. Actual exports in 2000/01 are for three quarters only.
Sources: WTO Panel Report (WT/DS103/R, WT/DS113/R) and Statistics Canada.

Economic Research Service, USDA

processors to purchase surplus milk at discount for the exclusive use of manufacturing dairy products for export. Canada claimed the discount sales did not provide export subsidies and thus were acceptable under the Agreement on Agriculture. The U.S., joined by New Zealand, disagreed.

Canada's permit system provided for pricing five classes of milk based on processors' end use of the milk. Classes 1-4 covered milk used exclusively in the domestic market. Class 5 contained five "Special Milk Classes" (SMC). SMC 5(a) to 5(c) comprised milk in dairy products used as ingredients in other products mostly sold domestically. SMC 5(d) was primarily for milk used in dairy product exports to traditional markets. These traditional

Canada's Dairy Industry at a Glance

In the1999/2000 marketing year (August to July), Canada had 20,600 dairy farms, producing 17.8 billion pounds of milk, compared with 84,260 farms producing 17.1 billion pounds in 1974/75. The average Canadian dairy farm has 54 cows, compared with 82 in the U.S.

Total Canadian milk production in 1999/2000 was down about 1 percent from the previous year. About 40 percent of milk production, or 7.1 billion pounds, was processed into table milk and cream, an increase of almost 1 percent over the previous year. The remaining 60 percent, or 10.7 billion pounds, was used in the production of dairy products, which decreased about 2.3 percent.

Processing at 270 plants across Canada resulted in $8.5 billion (all currency in Canadian dollars: US$1 = Can$1.5) of processed dairy products in 1999. An estimated $365 million of this production was exported, down from the 1998 peak of $414 million. Exports in 2000 fell again to an estimated $285 million.

Per capita milk consumption in Canada averaged 197 pounds in 1999, down from 215 pounds in 1990. Lower fat varieties such as skim and 1-percent milk continued to gain market share, accounting for 28.6 percent of all milk consumed in 1999, compared with 12.8 percent in 1990. Butter consumption closed the decade at 6.2 pounds per person, down from 11.8 pounds in 1990 but above the record-low 5.7 pounds in 1997. Ice cream consumption also decreased from 26.0 pounds to 22.6 pounds during the same period.

Canadian consumers did not abandon higher fat products entirely. Cheese consumption closed the decade at 23.8 lbs. per person, up 8 percent from 1990. Cream also enjoyed a surge in popularity, as consumption in 1999 reached 13.6 lbs. per person, up from 11.8 lbs. in 1990.

Dairy farming is the third-largest source of revenue in the Canadian agricultural sector, behind grains and red meats. In general, profitability of Canadian dairy farms was higher than for farms in other commodity sectors, with an operating margin of $0.26 per dollar of revenue, up 1.1 cent from 1998. Dairy farm cash receipts increased about 2.6 percent in 2000, reaching $4 billion, breaking the record set in the previous year. (In contrast, crop producers' receipts fell in 2000 for the third consecutive year, hitting a 6-year low.)

While Canadian dairy farmers have benefited from the comparative price and income stability associated with supply management, a portion of these gains has been capitalized in the value of the quota. As a result, the benefits of supply management tend to be greatest for those who were producing at the time the quotas were introduced in the early 1970s. During 2000, the market-clearing price for quota in Quebec (Canada's leading milk-producing province) ranged between $24,000 and $27,450 for the right to sell one kg (2.2 lbs.) of butterfat daily on the domestic market.

exports were included in determining national production quotas. SMC 5(e) was surplus milk not needed domestically and available for use in dairy products for export above the quantities destined for traditional markets.

The prices of 5(d) and 5(e) were negotiated between the CDC and processors on a transaction-by-transaction basis. Revenues from within-quota milk used for export were pooled across provinces with revenue from domestic sales. However, returns for milk produced in excess of quota and sold through 5(e) at discounted prices were not pooled with domestic market returns before being paid to individual producers.

Under the Agreement on Agriculture, Canada, like the U.S. and the European Union, had agreed to limit its subsidized exports. However, the permit system led to rapid expansion of exports of some dairy products, in excess of Canada's export subsidy limits. Butter exports grew from less than 1,000 metric tons in 1994/95 (August to July marketing year) to nearly14,000 tons in 1995/96, the first year under the new program. In 1996/97 and 1997/98, butter exports averaged about 11,000 tons. Cheese exports increased steadily from about 12,000 tons in 1994/95 to 30,000 tons in 1998/99. Unlike butter and cheese, skim milk powder exports did not increase, nor did they exceed the permitted subsidy limits. Exports of other milk products from 1995/96 to 1999/2000 were above the agreed-to limits. For 2000/01, Canada is limited to export subsidies on 3,500 tons of butter, 9,076 tons of cheese, 44,953 tons of skim milk powder, and 30,282 tons of other milk products.

What Constitutes an Export Subsidy?

In February 1998, after unsuccessful discussions with Canada to resolve the subsidy issue, the U.S. and New Zealand requested that a WTO compliance panel investigate Canada's dairy export practices. The U.S. maintained that Canada's system of special milk classes, which provided surplus milk at discounted prices to exporters, constituted an export subsidy and a violation of Canada's commitments under the Agreement on Agriculture. The U.S. also requested WTO review of Canada's restriction on commercial imports under its tariff-rate quota of 64,500 tons of fluid milk, claiming this also was a violation of its WTO commitment. Canada asserted that cross-border shoppers were already bringing in that amount, and that the commitment was thus being met without commercial imports.

In May 1999, a WTO compliance panel found that SMC 5(d) and 5(e) were financed by virtue of government action and constituted export subsidies within the Agreement on Agriculture definition. The panel noted the significant government involvement in the provision of milk to dairy product exporters at prices substantially below the levels otherwise available in Canada.

Special Article

Economics of Supply Management & Two-Tiered Price Schemes

In addition to being administratively complex, supply management tends to decrease incentives for farmers to improve technology and expand scale in order to reduce costs. It prevents efficient distribution of production and processing across countries, or across regions within a country. By introducing a wedge between domestic and world prices, supply management raises consumer prices, while requiring import restrictions to prevent an influx of lower priced foreign goods. Were it not for production quotas, surplus stocks would likely accumulate in the face of high domestic price supports. Occasional and inevitable surpluses still occur, but under pure supply management these are controlled through quota or stock adjustments or by subsidizing exports.

When a country is a net importer at the world price, supply management results in trade distortion. If supply management imposes no controls over the amount farmers produce, and if over-quota production is exported at a lower price, trade distortion increases. High domestic prices from supply management distort trade both by reducing consumption and providing some producers a solid base on which to expand output. Trade distortion continues whether or not the government is directly involved in allocating product between the domestic and export markets.

How do two-tiered price schemes—based on parallel markets for domestic consumption and export at differentiated prices—result in expanded output? Under supply management, there will always be some producers with unused capacity. When high domestic prices cover producers' average total cost, those with the capacity to produce in excess of their quota limits will expand output as long as the export price covers the extra, or marginal, cost of additional production (primarily feed). If producers were not receiving sufficient revenue from domestic sales to cover their fixed costs (land, buildings, equipment, animals, etc.), the export price alone would have to cover the producer's average total cost (both fixed and variable costs) or eventually producers would go out of business.

Producers who can maximize profits by selling excess production into the commercial export market would probably be producing not for export but for the domestic returns they receive from the government policy of supply management. While some producers with quota and excess production capacity may view the export market as an attractive source of additional profits, it is unlikely to be attractive to producers who would have to take on additional fixed costs, such as a building, in order to increase production for export.

While producers played an important role in the provincial marketing boards, the panel found the boards acted under the explicit authority delegated to them by either the Federal or a provincial government. Accordingly, the panel presumed the boards to be an "agency" of one or more of Canada's governments. The panel also found that Canada's restriction on access to its tariff quota on fluid milk was inconsistent with the Agreement on Agriculture and recommended Canada open the quota to commercial imports.

Canada disputed the conclusions of the compliance panel and sought an Appellate Body review of the findings. The Appellate Body upheld the panel's determination that SMC 5(d) and 5(e) were export subsidies and thus contributed to a violation of Canada's export subsidy commitments. However, the Appellate Body overruled the panel's finding in the case of fluid milk and allowed Canada to continue restricting commercial imports of fluid milk in light of cross-border purchases by Canadian consumers. In October 1999, the WTO Dispute Settlement Body (DSB) adopted the Appellate Body report and requested Canada to bring its export subsidy practices into compliance with its WTO obligations.

Canada's Export Practices Remain in Dispute

After the Appellate Body ruling in 1999, the Canadian government consulted with its dairy industry and explored alternatives for complying with the WTO ruling. Some members of the industry interpreted the WTO decision as a narrow one that precluded government involvement in the export of dairy products, but permitted a two-tiered price system of higher milk prices for domestic use and discounted prices for export.

By August 2000, Canada began implementing revised procedures which it felt would comply with the panel's recommendations. While the revised procedures differed in many ways from the old, they still provided milk at discounted prices to processors, contingent on the verified export of the manufactured product.

Under the revised system, Canada retained and continued to export dairy products through SMC 5(d), while replacing the SMC 5(e) export subsidies with a procedure that encourages exporters to contract directly with producers. In several provinces, including Ontario and Quebec, an "auction" system was organized, administered by third-party companies appointed by the marketing boards. Exporters or processors post proposals on an electronic bulletin board with terms such as price, volume, and contract period. Producers bid on these contracts to supply milk. In British Columbia, Alberta, and Saskatchewan, provincial marketing boards provide processors or exporters with names of producers with whom they can negotiate directly for surplus milk.

In February 2001, Canada informed the DSB of its compliance with WTO rules. Shortly thereafter, the U.S. and New Zealand challenged Canada's revised system on the grounds that the changes did not go far enough in bringing its export subsidies into compliance with its WTO obligations. The U.S. maintained that Canada had simply replaced the SMC 5(e) export subsidies with a new export subsidy program offering discounted milk to

Canadian Dairy Production Is Small Compared with U.S., but Exports Are Important

	U.S.	Canada
Dairy cows (millions)	9.2	1.1
Dairy farms (number)	111,000	20,600
Average size (cows/farm)	82	54
Milk production (billion lbs.)	162.7	17.8
Used in manufacturing (%)	63	60
Used for fluid milk and other (%)	37	40
Products manufactured:		
Butter (million lbs.)	1,275	195
Cheese (million lbs.)	7,944	926
Consumption per capita:		
Fluid milk (lbs.)	218.0	197.0
Butter (lbs.)	4.8	6.2
Cheese (lbs.)	29.8	23.8
Exports:		
Butter (metric tons)	3,208	1,933
Cheese (metric tons)	38,341	22,110

1999 data. Cheese numbers exclude cottage and processed.
Sources: USDA, Agricultural Statistics 2001; Statistics Canada.
Economic Research Service, USDA

exporters. The new program continued to provide a subsidy to exporters roughly equal to the difference between the domestic market price and the discounted price.

In February 2001, the U.S. and New Zealand requested that a WTO compliance panel be convened to rule on the issue. Both countries also requested authorization to increase tariffs on Canadian agricultural products if the panel determines that Canada has not complied. Each agreed, however, to hold off on tariff increases until a WTO arbitrator confirms the level of trade harm suffered. Both the U.S. and New Zealand assert that their trade has been impaired by up to $35 million annually. In July 2001, the compliance panel determined that Canada is subsidizing dairy exports at levels exceeding its committed-to limits. Canada has indicated its intention to appeal the panel's decision.

What the Future Holds

The next step in this longstanding dispute will involve Canada's appeal of the compliance panel's ruling. Canada will have 60 days from July 11 to prepare its appeal. The appeal, however, could delay the final outcome of the case until early 2002. While a ruling on the appeal is expected by November, a finding against Canada will have to be followed by a WTO arbitrator ruling on the level of harm suffered by each complainant's economy. The U.S. and New Zealand could then increase tariffs on Canadian imports until such time as the WTO confirms that Canada has made its dairy exports compliant with it's WTO commitments.

For Canada's milk producers and dairy processors, the export market is crucial for expanding production and sales. With initiation of the Agreement on Agriculture, the Canadian dairy industry found itself in a potential supply/demand squeeze. Imports were set to increase as a result of expanding tariff-rate quotas, while the ability to subsidize exports was being curtailed. At the same time, the domestic market for dairy products was largely mature, with little growth expected. Unless the dairy industry could succeed in increasing "nonsubsidized" exports, production might have to be reduced or stocks left to accumulate. Considered essential was a two-tier price scheme that distinguishes between domestic and export markets, allowing milk producers to expand production or dispose of surplus milk without having to purchase additional quota, while permitting processors to compete on the world market.

The dairy panel case is significant not only as the first case brought before a WTO panel involving provisions of the Agreement on Agriculture related to export subsidies, but also because of its potential implications beyond trade in dairy products. With discussions underway in the WTO on further disciplining government policies regulating agricultural trade, the U.S. and New Zealand did not want a perceived circumvention of already existing disciplines to go unchallenged. Perhaps more importantly, if Canada loses its appeal, this case could discourage other countries from fashioning identical policies, while leaving countries with similar policies vulnerable to future WTO challenges. AO

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The WTO panel reports can be found at www.wto.org/english/tratop_e/dispu_e/distab_e.htm.

For more information on the WTO Agreement on Agriculture, see the **WTO briefing room** on the Economic Research Service website at www.ers.usda.gov/briefing/WTO

Featured on the WTO briefing room: ***Agricultural Policy Reform in the WTO—The Road Ahead***
—the full report presenting ERS analysis of reform options for export subsidies and other trade-distorting policies

Statistical Indicators

Summary Data

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

				2000		2001				2002
	2000	2001	2002	III	IV	I	II	III	IV	I
Prices received by farmers (1990-92=100)	96	104	--	97	97	100	--	--	--	--
Livestock & products	97	107	--	98	99	103	--	--	--	--
Crops	96	100	--	96	95	97	--	--	--	--
Prices paid by farmers (1990-92=100)										
Production items	116	120	--	116	118	120	--	--	--	--
Commodities and services, interest, taxes, and wage rates (PPITW)	120	124	--	120	121	124	--	--	--	--
Cash receipts ($ bil.)	194	202	--	42	50	58	47	45	51	--
Livestock	100	107	--	25	26	26	26	28	27	--
Crops	95	95	--	24	32	22	19	23	32	--
Market basket (1982-84=100)										
Retail cost	171	--	--	172	173	--	--	--	--	--
Farm value	97	--	--	97	100	--	--	--	--	--
Spread	210	--	--	211	212	--	--	--	--	--
Farm value/retail cost (%)	20	--	--	20	20	--	--	--	--	--
Retail prices (1982-84=100)										
All food	168	173	177	169	170	172	173	174	175	176
At home	168	173	177	169	170	172	173	174	175	176
Away from home	169	174	179	170	171	172	173	175	176	177
Agricultural exports ($ bil.) [1]	50.9	53.5	--	12.2	14.4	13.8	12.4	12.9	14.2	14.2
Agricultural imports ($ bil.) [1]	38.9	39.0	--	9.1	9.7	9.9	9.9	9.5	9.3	10.0
Commercial production										
Red meat (mil. lb.)	46,150	44,997	44,933	11,623	11,634	11,096	11,159	11,532	11,210	11,051
Poultry (mil. lb.)	36,427	36,897	37,705	9,070	9,050	9,007	9,405	9,255	9,230	9,175
Eggs (mil. doz.)	7,035	7,146	7,270	1,751	1,786	1,756	1,775	1,780	1,835	1,800
Milk (bil. lb.)	167.7	165.7	169.9	41.2	40.7	41.3	42.6	40.7	41.1	42.4
Consumption, per capita										
Red meat and poultry (lb.)	219.5	216.2	215.2	55.2	55.5	53.1	54.1	54.4	54.6	52.4
Corn beginning stocks (mil. bu.) [2]	1,787.0	1,717.5	--	5,601.9	3,585.9	1,717.5	8,522.2	6,043.0	3,924.2	--
Corn use (mil. bu.) [2]	9,514.8	9,745.0	--	2,021.5	1,870.7	3,165.0	2,480.1	2,122.3	--	--
Prices [3]										
Choice steers--Neb. Direct ($/cwt)	69.65	75-77	77-83	65.43	72.26	79.11	75.30	73-75	74-80	75-81
Barrows and gilts--IA, So. MN ($/cwt)	44.70	46-47	42-45	46.43	40.78	42.83	52.05	48-50	40-42	40-44
Broilers--12-city (cents/lb.)	56.20	58-60	59-64	56.80	57.60	57.80	59.30	59-61	56-60	57-61
Eggs--NY gr. A large (cents/doz.)	68.90	71-73	65-71	67.10	83.10	75.80	63.30	69-71	74-80	67-73
Milk--all at plant ($/cwt)	12.33	15.15-15.45	13.20	12.67	12.70	13.37	15.33	16.10-16.50	15.90-16.60	13.40-14.40
Wheat--KC HRW ordinary ($/bu.)	3.08	--	--	3.00	3.44	3.45	3.41	--	--	--
Corn--Chicago ($/bu.)	1.97	--	--	1.64	2.01	2.03	1.92	--	--	--
Soybeans--Chicago ($/bu.)	4.86	--	--	4.60	4.70	4.48	4.48	--	--	--
Cotton--avg. spot 41-34 (cents/lb)	57.47	--	--	58.36	61.24	52.66	39.86	--	--	--
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Farm real estate values [4]										
Nominal ($ per acre)	703	713	740	798	844	887	926	974	1,020	1,050
Real (1982 $)	521	507	514	540	558	572	586	606	627	636
U.S. civilian employment (mil.) [5]	126.3	128.1	129.2	131.1	132.3	133.9	136.3	137.7	139.4	--
Food and fiber (mil.)	23.7	23.1	23.6	24.2	24.5	24.2	24.1	24.0	24.3	--
Farm sector (mil.)	2.0	1.9	1.8	1.9	2.0	2.0	1.9	1.8	1.7	--
U.S. gross domestic product ($ bil.)	5,986.2	6,318.9	6,642.3	7,054.3	7,400.5	7,813.2	8,318.4	8,790.2	9,299.2	--
Food and fiber--net value added ($ bil.)	877.5	924.8	965.7	1,066.2	1,126.5	1,210.4	1,317.1	1,446.4	1,521.4	--
Farm sector--net value added ($ bil.) [6]	71.1	75.5	73.1	78.3	75.3	86.7	83.5	74.8	69.8	--

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

U.S. & Foreign Economic Data

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

				1999		2000				2001
	1998	1999	2000	III	IV	I	II	III	IV	I
	Billions of current dollars (quarterly data seasonally adjusted at annual rates)									
Gross Domestic Product	8,790.2	9,299.2	9,963.1	9,340.9	9,559.7	9,752.7	9,945.7	10,039.4	10,114.4	10,226.8
Gross National Product	8,750.0	9,236.2	9,958.7	9,327.3	9,546.3	9,745.0	9,937.4	10,030.5	10,121.8	10,219.8
Personal consumption expenditures	5,850.9	6,268.7	6,757.3	6,319.9	6,446.2	6,621.7	6,706.3	6,810.8	6,890.2	7,002.3
Durable goods	693.9	761.3	820.3	767.2	787.6	826.3	814.3	824.7	815.8	839.2
Nondurable goods	1,707.6	1,845.5	2,010.0	1,860.0	1,910.2	1,963.9	1,997.6	2,031.5	2,046.9	2,071.8
Food	845.8	897.8	953.2	900.4	926.1	938.4	948.3	959.9	966.2	976.9
Clothing and shoes	286.4	307.0	328.3	308.7	311.9	323.1	325.6	330.9	333.6	336.8
Services	3,449.3	3,661.9	3,927.0	3,692.7	3,748.5	3,831.6	3,894.4	3,954.6	4,027.5	4,091.3
Gross private domestic investment	1,549.9	1,650.1	1,832.7	1,659.1	1,723.7	1,755.7	1,852.6	1,869.3	1,853.3	1,788.8
Fixed investment	1,472.9	1,606.8	1,778.2	1,622.4	1,651.0	1,725.8	1,780.5	1,803.0	1,803.5	1,814.8
Change in private inventories	77.0	43.3	54.5	36.7	72.7	29.9	72.0	66.4	49.8	-26.1
Net exports of goods and services	-151.5	-254.0	-370.7	-280.5	-299.1	-335.2	-355.4	-389.5	-402.7	-375.6
Government consumption expenditures and gross investment	1,540.9	1,634.4	1,743.7	1,642.4	1,688.8	1,710.4	1,742.2	1,748.8	1,773.6	1,811.3
	Billions of 1996 dollars (quarterly data seasonally adjusted at annual rates) [1]									
Gross Domestic Product	8,515.7	8,875.8	9,318.5	8,905.8	9,084.1	9,191.8	9,318.9	9,369.5	9,393.7	9,422.8
Gross National Product	8,515.1	8,868.3	9,316.6	8,895.4	9,075.0	9,187.7	9,313.7	9,362.8	9,402.2	9,417.8
Personal consumption expenditures	5,678.7	5,978.8	6,294.3	6,013.8	6,101.0	6,213.5	6,260.6	6,329.8	6,373.3	6,426.6
Durable goods	727.3	817.8	896.0	826.2	851.8	898.2	886.7	903.2	896.0	923.2
Nondurable goods	1,684.8	1,779.4	1,869.0	1,786.1	1,818.1	1,844.8	1,861.1	1,882.6	1,887.4	1,901.6
Food	812.8	845.9	877.3	846.7	866.0	872.2	876.5	879.1	881.4	882.5
Clothing and shoes	292.2	318.5	345.1	322.1	322.1	337.7	342.3	350.2	350.0	353.9
Services	3,269.4	3,390.8	3,543.9	3,411.1	3,443.0	3,487.2	3,526.7	3,559.3	3,602.5	3,618.2
Gross private domestic investment	1,566.8	1,669.7	1,839.8	1,680.8	1,751.6	1,773.6	1,863.0	1,871.1	1,851.5	1,786.5
Fixed investment	1,485.3	1,621.4	1,771.7	1,637.8	1,666.6	1,730.9	1,777.6	1,791.3	1,787.1	1,797.1
Change in private inventories	80.2	45.3	60.9	39.1	80.9	36.6	78.6	72.5	55.7	-19.2
Net exports of goods and services	-221.0	-322.4	-412.4	-342.6	-352.5	-376.8	-403.4	-427.7	-441.7	-422.6
Government consumption expenditures and gross investment	1,486.4	1,536.1	1,579.2	1,537.8	1,569.5	1,565.1	1,583.7	1,578.2	1,589.6	1,608.2
GDP implicit price deflator (% change)	1.3	1.5	2.0	0.9	1.3	3.3	2.4	1.6	2.0	3.2
Disposable personal income ($ bil.)	6,320.0	6,637.7	6,989.8	6,664.5	6,775.0	6,866.5	6,964.9	7,040.9	7,087.0	7,182.0
Disposable pers. income (1996 $ bil.)	6,134.1	6,331.0	6,511.0	6,341.7	6,412.2	6,443.1	6,502.0	6,543.7	6,555.3	6,591.4
Per capita disposable pers. income ($)	23,359	24,314	25,379	24,384	24,728	25,014	25,322	25,535	25,641	25,927
Per capita disp. pers. income (1996 $)	22,672	23,191	23,640	23,203	23,404	23,472	23,639	23,732	23,718	23,795
U.S. resident population plus Armed Forces overseas (mil.) [2]	270.5	272.9	275.4	273.2	273.9	274.4	275.0	275.6	276.3	--
Civilian population (mil.) [2]	269.0	271.5	273.9	271.7	272.4	273.0	273.5	274.2	274.9	--
	Annual			2000		2001				
	1998	1999	2000	May	Dec	Jan	Feb	Mar	Apr	May
	Monthly data seasonally adjusted									
Total industrial production (1992=100)	138.2	144.8	153.6	153.1	152.6	151.3	150.7	150.1	149.1	148.1
Leading economic indicators (1996=100)	105.4	108.8	109.9	106.0	108.5	109.0	108.8	108.5	108.7	109.3
Civilian employment (mil. persons)	131.5	133.5	135.2	134.8	135.8	136.0	135.8	135.8	135.4	135.1
Civilian unemployment rate (%)	4.5	4.2	4.0	4.1	4.0	4.2	4.2	4.3	4.5	4.4
Personal income ($ bil. annual rate)	7,391.0	7,789.6	8,281.7	8,237.6	8,461.0	8,510.6	8,555.8	8,596.0	8,613.4	8,631.6
Money stock-M2 (daily avg.) ($ bil.) [3]	4,385.9	4,653.3	4,945.2	4,766.6	4,945.2	4,995.3	5,040.6	5,101.1	5,145.1	5,166.8
Three-month Treasury bill rate (%)	4.81	4.66	5.85	5.92	5.83	5.27	4.93	4.50	3.92	3.67
AAA corporate bond yield (Moody's) (%)	6.53	7.04	7.62	7.99	7.21	7.15	7.10	6.98	7.20	7.29
Total housing starts (1,000) [4]	1,616.9	1,640.9	1,568.7	1,573	1,532	1,666	1,623	1,592	1,629	1,622
Business inventory/sales ratio [5, 6]	1.44	1.41	1.40	1.39	1.42	1.43	1.43	1.43	1.44	--
Retail & food services sales ($ bil.) [6, 7]	2,906.7	3,149.2	3,388.82	280.4	283.7	288.1	288.2	287.1	291.1	292.2
Food and beverage stores ($bil.)	421.6	441.4	465.29	38.6	39.5	39.6	39.8	39.7	39.7	40.0
Clothing & accessory stores ($ bil.)	149.4	159.7	168.48	14.0	14.3	14.5	14.6	14.3	14.3	14.2
Food services & drinking places ($ bil.)	272.6	286.3	306.07	25.3	25.8	26.5	26.3	26.4	26.4	26.7

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

Table 3—World Economic Growth

	Calendar year									
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Real GDP, annual percent change									
World	1.7	3.3	2.8	3.2	3.5	2.2	2.9	4.0	1.8	2.9
less U.S.	1.3	3.0	2.9	3.1	3.1	1.5	2.4	3.6	1.9	2.9
Developed economies	0.9	2.8	2.3	2.7	3.1	2.5	2.8	3.6	1.4	2.3
less U.S.	0.1	2.2	2.1	2.3	2.4	1.5	2.1	2.8	1.2	2.1
United States	2.7	4.0	2.7	3.6	4.4	4.4	4.2	5.0	1.6	2.7
Canada	2.4	4.7	2.8	1.6	4.3	3.9	5.1	4.4	2.4	2.7
Japan	0.5	1.0	1.6	3.3	1.9	-1.1	0.8	1.5	-0.5	0.9
Australia	3.7	5.2	3.8	4.1	4.0	5.3	4.7	3.8	2.7	3.1
European Union	-0.4	2.7	2.4	1.6	2.5	2.8	2.5	3.4	2.0	2.7
Transition economies	-5.8	-7.4	-0.6	0.1	1.8	1.5	2.0	4.7	3.5	4.2
Eastern Europe	2.1	4.7	6.5	4.5	3.6	3.1	2.6	3.8	3.2	4.5
Poland	3.8	5.2	7.0	6.1	6.9	4.8	4.0	4.2	3.1	4.6
Former Soviet Union	-13.3	-20.9	-11.2	-7.7	-1.9	-1.9	0.4	6.9	4.1	3.5
Russia	-8.7	-11.6	-4.1	-3.5	0.9	-4.9	5.0	8.3	3.5	4.0
Developing economies	5.8	6.3	5.2	5.8	5.3	1.2	3.5	5.7	3.5	5.1
Asia	7.9	8.8	8.3	7.4	5.8	0.3	6.4	7.2	4.4	6.2
East Asia	9.0	9.7	8.7	7.7	7.0	1.8	7.6	8.1	5.0	6.6
China	13.5	12.6	10.5	9.6	8.8	7.8	7.1	8.0	7.6	8.4
Taiwan	7.0	7.1	6.4	6.1	6.7	4.6	5.4	6.0	1.4	4.7
Korea	5.5	8.2	8.9	6.7	5.0	-6.7	10.9	8.8	3.4	4.8
Southeast Asia	7.9	8.3	8.3	7.3	4.0	-7.5	3.5	5.9	2.7	5.2
Indonesia	7.3	7.5	8.2	7.8	4.7	-13.2	0.7	4.8	3.3	5.0
Malaysia	9.9	9.2	9.8	10.0	7.3	-7.4	5.8	8.4	2.5	5.5
Philippines	2.1	4.4	4.7	5.8	5.2	-0.8	3.2	4.0	2.1	3.7
Thailand	8.4	9.0	8.9	5.9	-1.7	-10.2	4.2	4.4	2.4	5.3
South Asia	4.5	6.6	7.1	6.3	4.2	6.1	6.1	5.5	4.4	6.1
India	5.0	7.3	7.7	7.0	4.6	6.8	6.5	6.1	4.6	6.6
Pakistan	1.9	3.9	5.1	3.9	1.0	2.5	4.0	3.4	2.7	3.7
Latin America	4.3	5.3	1.3	3.6	5.1	1.9	0.1	3.8	2.6	3.7
Mexico	1.9	4.5	-6.2	5.1	6.8	4.9	3.8	6.9	2.2	4.5
Caribbean/Central	4.7	4.0	3.2	3.6	5.9	6.1	7.1	6.0	4.0	4.5
South America	4.9	5.6	3.1	3.3	4.8	1.1	-1.0	2.9	2.7	3.4
Argentina	5.9	5.8	-2.8	5.5	8.1	3.9	-3.1	-0.4	0.7	3.0
Brazil	4.9	5.9	4.2	2.8	3.2	0.1	0.8	4.1	2.9	3.4
Colombia	5.4	5.8	5.2	2.0	2.8	0.6	-4.3	2.8	4.5	4.0
Venezuela	0.3	-2.3	3.7	-0.5	6.5	-0.7	-6.1	3.2	4.9	2.7
Middle East	4.0	-0.2	3.9	4.4	4.8	2.7	-1.1	4.9	0.4	3.8
Israel	5.6	6.9	7.0	5.1	3.2	2.6	2.2	5.4	2.3	3.9
Saudi Arabia	-0.6	0.5	0.5	1.4	1.9	2.3	-1.1	3.5	3.0	2.5
Turkey	8.7	-5.2	7.8	7.0	7.5	2.8	-4.7	7.0	-4.4	5.5
Africa	1.0	3.2	2.9	5.2	2.8	3.2	2.6	3.7	3.9	3.7
North Africa	0.5	3.9	1.5	6.5	2.6	5.7	3.8	4.0	4.5	4.0
Egypt	2.9	3.9	4.7	5.0	5.5	5.6	6.0	5.2	4.5	4.2
Sub-Sahara	1.4	2.6	3.9	4.3	3.0	1.3	1.7	3.4	3.3	3.5
South Africa	1.2	3.2	3.1	4.2	2.5	0.6	1.2	3.1	2.8	3.2
	Consumer prices, annual percent change									
Developed economies	3.1	2.6	2.6	2.4	2.1	1.5	1.4	2.3	2.1	1.8
Transition economies	634.3	274.2	133.5	42.4	27.4	21.8	43.9	20.1	15.3	10.0
Developing economies	43.2	55.3	23.2	15.4	9.9	10.4	6.7	6.1	5.7	4.8
Asia	10.8	16.0	13.2	8.3	4.8	7.7	2.5	1.9	2.8	3.3
Latin America	152.1	200.3	36.0	21.2	12.9	9.8	8.8	8.1	6.3	4.8
Middle East	29.4	37.3	39.1	29.6	27.7	27.6	23.2	20.7	18.4	13.5
Africa	39.0	54.8	35.1	30.1	14.4	9.1	11.5	13.5	9.6	5.7

-- = 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			2000	2001				
	1999	2000	2001	Jun	Jan	Feb	Mar	Apr	May
					1990-92=100				
Prices received									
All farm products	96	96	102	98	97	100	103	106	108
All crops	97	96	99	98	94	98	98	102	105
Food grains	90	86	92	84	93	91	92	92	95
Feed grains and hay	86	86	90	90	89	90	90	89	91
Cotton	85	82	78	74	86	81	71	72	70
Tobacco	102	106	103	--	118	118	97	82	--
Oil-bearing crops	83	85	79	88	84	80	78	75	77
Fruit and nuts, all	116	101	105	107	91	92	96	105	96
Commercial vegetables	110	122	135	118	120	144	138	142	146
Potatoes and dry beans	100	93	87	101	78	85	93	96	105
Livestock and products	95	97	105	98	100	102	108	108	110
Meat animals	83	94	101	97	97	98	103	104	103
Dairy products	110	94	104	94	101	100	106	110	118
Poultry and eggs	110	107	113	106	105	112	119	116	115
Prices paid									
Commodities and services, interest, taxes, and wage rates (PPITW)	115	120	124	120	124	124	123	123	123
Production items	111	116	120	116	120	120	119	120	120
Feed	100	101	107	103	109	106	105	105	106
Livestock and poultry	95	110	110	108	111	108	109	112	110
Seeds	121	124	127	125	124	124	125	134	134
Fertilizer	105	109	134	106	134	139	135	135	131
Agricultural chemicals	121	120	123	120	127	126	121	121	121
Fuels	93	135	134	132	143	143	128	127	133
Supplies and repairs	121	124	126	124	126	125	126	126	127
Autos and trucks	119	119	119	119	120	119	119	119	118
Farm machinery	135	140	142	139	137	137	142	143	143
Building material	120	121	121	122	120	121	121	121	122
Farm services	116	118	119	119	119	119	119	119	119
Rent	113	113	114	113	114	114	114	114	114
Interest payable per acre on farm real estate debt	106	112	116	112	116	116	116	116	116
Taxes payable per acre on farm real estate	120	123	123	123	123	123	123	123	123
Wage rates (seasonally adjusted)	135	140	149	140	149	149	149	144	144
Prod. items, interest, taxes & wage rates (PITW)	113	118	122	118	123	122	122	122	122
Ratio, prices received to prices paid (%)*	83	80	72	82	78	81	84	86	88
Prices received (1910-14=100)	607	612	647	625	614	634	656	671	684
Prices paid, etc. (1910-14=100)	1,531	1,594	1,646	1,595	1,651	1,647	1,640	1,643	1,644
Parity ratio (1910-14=100) (%)*	40	38	39	39	37	38	40	41	42

-- = Not available. Values for the two most recent months are revised or preliminary. *Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio uses the most recent prices paid index. Data for this table are taken from the publication *Agricultural Prices*, which is produced monthly by USDA's National Agricultural Statistics Service (NASS) and is available at http://usda.mannlib.cornell.edu/reports/nassr/price/pap-bb/. For historical data or for categories not listed here, call the NASS Information Hotline at 1-800-727-9540, or access the NASS Home Page at http://www.usda.gov/nass.

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

	Annual [1]			2000	2001					
	1997	1998	1999	Jun	Jan	Feb	Mar	Apr	May	Jun
Crops										
All wheat ($/bu.)	3.38	2.65	2.55	2.50	2.85	2.83	2.87	2.86	2.99	2.76
Rice, rough ($/cwt)	9.70	8.89	6.00	5.80	5.84	5.72	5.55	5.59	5.15	4.95
Corn ($/bu.)	2.43	1.94	1.90	1.91	1.98	1.96	1.95	1.89	1.82	1.76
Sorghum ($/cwt)	3.95	2.97	2.95	3.32	3.37	3.48	3.29	3.06	3.21	3.25
All hay, baled ($/ton)	100.00	84.60	77.00	82.50	84.90	86.80	87.20	94.80	106.00	95.80
Soybeans ($/bu.)	6.47	4.93	4.75	4.93	4.68	4.46	4.39	4.22	4.32	4.47
Cotton, upland (¢/lb.)	65.20	60.20	44.90	45.10	52.30	49.10	43.20	43.50	42.20	42.70
Potatoes ($/cwt)	5.62	5.56	5.84	6.14	4.56	5.02	5.56	5.71	6.31	6.39
Lettuce ($/cwt) [2]	17.50	16.10	13.30	13.50	13.70	23.20	15.00	21.60	18.50	13.40
Tomatoes, fresh ($/cwt) [2]	31.70	35.20	25.90	22.60	43.80	28.70	56.50	22.90	37.50	28.50
Onions ($/cwt)	12.60	13.80	9.78	11.40	13.90	14.10	15.60	21.00	19.00	15.90
Beans, dry edible ($/cwt)	19.30	19.00	17.60	14.70	15.00	15.20	15.00	16.20	16.60	16.40
Apples for fresh use (¢/lb.)	22.10	17.30	21.20	16.10	16.10	15.20	14.20	15.80	15.40	15.30
Pears for fresh use ($/ton)	276.00	291.00	294.00	220.00	340.00	251.00	274.00	304.00	364.00	399.00
Oranges, all uses ($/box) [3]	4.22	4.29	5.94	4.70	2.82	3.29	4.13	5.02	4.80	4.30
Grapefruit, all uses ($/box) [3]	1.93	2.00	3.22	2.73	1.87	2.07	1.53	1.36	1.94	5.27
Livestock										
Cattle, all beef ($/cwt)	63.10	59.60	63.40	68.50	74.80	74.80	76.30	75.60	73.60	73.90
Calves ($/cwt)	78.90	78.80	87.70	104.00	108.00	109.00	112.00	111.00	111.00	109.00
Hogs, all ($/cwt)	52.90	34.40	30.30	48.90	37.20	39.10	46.00	47.80	50.40	52.10
Lambs ($/cwt)	90.30	72.30	74.50	89.70	74.10	80.10	84.40	85.20	79.00	--
All milk, sold to plants ($/cwt)	13.36	15.46	14.38	12.30	13.20	13.00	13.90	14.40	15.40	16.20
Milk, manuf. grade ($/cwt)	12.17	14.24	12.86	10.40	10.90	11.10	12.20	12.90	14.30	15.00
Broilers, live (¢/lb.)	37.70	39.30	37.10	34.00	34.00	37.00	40.00	39.00	40.00	41.00
Eggs, all (¢/doz.) [4]	70.30	66.80	62.70	61.80	67.20	68.20	69.10	66.50	55.30	55.80
Turkeys (¢/lb.)	39.90	38.00	40.80	41.80	36.60	36.30	37.10	37.80	38.30	38.50

-- = Not available. Values for the two most recent months are revised or preliminary. 1. Season-average price by crop year for crops. Calendar year average of monthly prices for livestock. 2. Excludes Hawaii. 3. Equivalent on-tree returns. 4. Average of all eggs sold by producers including hatching eggs and eggs sold at retail. Data for this table are taken from the publication *Agricultural Prices,* which is produced monthly by USDA's National Agricultural Statistics Service (NASS) and is available at http://usda.mannlib.cornell.edu/reports/nassr/price/pap-bb/. For historical data or for categories not listed here, call the NASS Information Hotline at 1-800-727-9540, or access the NASS Home Page at http://www.usda.gov/nass.

Producer & Consumer Prices

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

	Annual			2000	2001					
	1998	1999	2000	Jun	Jan	Feb	Mar	Apr	May	Jun
					1982-84=100					
Consumer Price Index, all items	163.0	166.6	172.1	172.3	175.1	175.8	176.2	176.9	177.7	178.0
CPI, all items less food	163.6	167.0	172.9	173.2	175.9	176.6	177.1	177.8	178.6	179.0
All food	160.7	164.1	167.8	167.3	170.9	171.3	171.7	171.9	172.5	173.0
Food away from home	161.1	165.1	169.0	168.6	171.4	171.8	172.3	172.7	173.1	173.6
Food at home	161.1	164.2	167.9	167.3	171.3	171.8	172.0	172.2	172.8	173.3
Meats[1]	141.6	142.3	150.7	151.7	154.1	156.5	157.9	158.0	158.9	160.2
Beef and veal	136.5	139.2	148.1	149.4	154.8	158.6	160.1	161.5	161.7	162.5
Pork	148.5	145.9	156.5	157.5	156.7	157.9	159.4	157.9	160.4	162.6
Poultry	157.1	157.9	159.8	159.3	160.8	161.8	162.6	163.1	162.3	164.5
Fish and seafood	181.7	185.3	190.4	191.9	192.8	193.0	190.7	192.4	194.6	191.5
Eggs	135.4	128.1	131.9	125.9	150.4	142.9	139.2	144.7	131.1	130.8
Dairy and related products[2]	150.8	159.6	160.7	159.5	163.6	163.6	163.2	163.4	164.7	166.9
Fats and oils[3]	146.9	148.3	147.4	146.6	153.0	152.6	153.1	151.5	154.7	156.7
Fresh fruits	246.5	266.3	258.3	244.6	261.8	253.5	257.3	269.4	274.0	268.3
Fresh vegetables	215.8	209.3	219.4	217.7	235.9	240.6	238.2	232.6	226.2	226.4
Potatoes	185.2	193.1	196.3	201.7	186.6	186.8	189.3	187.0	192.2	205.0
Cereals and bakery products	181.1	185.0	188.3	187.7	191.1	191.9	191.9	192.5	193.2	194.2
Sugar and sweets	150.2	152.3	154.0	154.0	155.7	155.8	155.7	154.0	155.8	155.7
Nonalcoholic beverages[4]	133.0	134.3	137.8	137.5	139.4	139.9	139.5	138.9	138.1	138.6
Apparel										
Footwear	128.0	125.7	123.8	123.9	121.4	122.6	125.2	124.9	124.4	122.1
Tobacco and smoking products	274.8	355.8	394.9	388.5	404.3	408.5	407.7	424.2	418.7	421.0
Alcoholic beverages	165.7	169.7	174.7	174.4	177.2	177.7	177.8	178.1	178.5	179.1

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://stats.bls.gov/blshome.html and a Consumer Prices Information Hotline at (202) 606-7828.

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

	Annual			2000	2001					
	1998	1999	2000	Jun	Jan	Feb	Mar	Apr	May	Jun
					1982=100					
All commodities	124.4	125.5	132.7	133.8	140.0	137.4	135.9	136.3	136.6	135.7
Finished goods[1]	130.6	133.0	138.0	138.6	141.2	141.4	141.0	141.7	142.5	142.1
All foods[2]	132.4	132.2	133.0	133.5	134.3	135.6	136.8	137.5	137.8	137.9
Consumer foods	134.3	135.1	137.2	137.6	138.6	140.0	140.9	141.6	141.8	141.9
Fresh fruits and melons	90.0	103.6	91.4	84.9	98.1	91.8	90.9	94.3	100.0	98.3
Fresh and dry vegetables	139.5	118.0	126.7	120.9	128.8	143.9	156.0	129.0	129.9	120.5
Dried and dehydrated fruits	124.4	121.2	122.9	122.6	121.2	116.4	121.5	121.0	115.1	115.1
Canned fruits and juices	134.4	137.8	140.0	140.4	142.6	142.6	142.4	143.8	143.7	143.6
Frozen fruits, juices and ades	116.1	123.0	120.9	122.4	115.8	116.7	115.2	115.2	114.6	115.1
Fresh vegetables except potatoes	137.9	117.7	135.0	128.1	147.0	168.6	183.2	145.6	144.9	129.4
Canned vegetables and juices	121.5	120.9	121.2	121.5	121.4	121.4	121.4	121.3	121.4	121.9
Frozen vegetables	125.4	126.1	126.0	124.9	127.6	128.5	127.0	127.9	127.8	128.0
Potatoes	122.5	126.9	100.5	94.4	88.5	86.6	98.5	100.5	131.8	147.6
Eggs for fresh use (1991=100)	90.1	77.9	84.9	81.9	95.7	89.6	88.2	104.2	72.1	71.8
Bakery products	175.8	178.0	182.3	182.3	184.9	185.4	187.3	187.2	187.4	188.2
Meats	101.4	104.6	114.3	119.5	115.8	118.8	121.3	123.0	124.1	123.5
Beef and veal	99.5	106.3	113.7	118.6	122.1	125.7	125.9	125.7	123.8	123.4
Pork	96.6	96.0	113.4	121.3	105.7	109.3	116.6	120.6	125.5	124.1
Processed poultry	120.7	114.0	112.9	111.8	110.0	112.3	113.5	115.7	115.3	116.7
Unprocessed and packaged fish	183.0	190.9	198.1	195.0	193.7	210.5	200.1	207.8	194.7	183.1
Dairy products	138.1	139.2	133.7	134.0	137.0	135.9	138.6	141.3	146.4	150.1
Processed fruits and vegetables	125.8	128.1	128.6	128.9	128.4	128.4	127.8	128.3	127.9	128.2
Shortening and cooking oil	143.4	140.4	132.4	132.0	129.5	129.3	131.6	130.7	130.6	131.0
Soft drinks	134.8	137.9	144.1	144.6	147.0	148.6	147.7	147.8	147.4	147.9
Finished consumer goods less foods	126.4	130.5	138.4	139.6	143.3	143.3	142.1	142.9	144.5	143.7
Alcoholic beverages	135.2	136.7	140.6	141.2	144.5	143.9	144.7	145.2	145.6	145.4
Apparel	126.6	127.1	127.4	127.3	127.3	127.4	126.7	126.4	126.5	126.2
Footwear	144.7	144.5	144.9	144.8	145.1	145.9	146.1	147.3	146.3	146.7
Tobacco products	283.4	374.0	397.2	393.2	426.7	426.9	426.8	426.6	447.3	447.8
Intermediate materials[3]	123.0	123.2	129.2	129.8	131.7	131.3	130.8	130.6	131.2	131.4
Materials for food manufacturing	123.1	120.8	119.2	120.6	120.3	120.7	122.3	123.3	124.6	125.7
Flour	109.2	104.3	103.8	104.2	107.2	107.6	108.9	107.9	109.6	110.7
Refined sugar[4]	119.8	121.0	110.6	111.2	106.8	109.9	108.1	108.2	108.8	109.6
Crude vegetable oils	131.1	90.2	73.6	75.6	60.9	59.1	65.6	66.8	68.6	70.9
Crude materials[5]	96.7	98.2	120.6	125.6	164.7	141.2	131.5	132.9	130.9	122.8
Foodstuffs and feedstuffs	103.8	98.7	100.2	101.9	104.8	104.3	108.9	109.1	110.3	109.7
Fruits and vegetables and nuts[6]	117.2	117.4	111.1	104.8	116.4	118.8	123.0	114.3	118.0	113.3
Grains	93.4	80.1	78.3	78.6	85.7	80.1	84.5	80.4	79.7	77.6
Slaughter livestock	82.3	86.4	96.5	100.4	100.9	102.3	107.9	108.4	107.2	106.0
Slaughter poultry, live	141.4	129.9	124.7	124.2	124.3	123.6	129.3	128.0	132.0	131.9
Plant and animal fibers	110.4	86.5	93.9	90.9	92.8	92.1	80.5	71.9	69.6	63.4
Fluid milk	112.6	106.3	92.0	91.5	98.1	97.5	102.0	107.4	115.0	121.1
Oilseeds	114.4	90.8	93.8	97.1	93.6	86.5	86.9	84.1	88.2	91.1
Leaf tobacco	104.6	101.6	--	--	119.9	121.4	107.0	81.1	--	--
Raw cane sugar	117.2	113.7	101.8	104.6	110.5	111.9	111.7	113.3	112.2	109.7

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

Farm-Retail Price Spreads

Table 8—Farm-Retail Price Spreads

	Annual			2000			2001			
	1998	1999	2000	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Market basket [1]										
Retail cost (1982-84=100)	163.1	167.3	170.6	168.5	171.9	174.0	174.7	175.1	175.4	176.0
Farm value (1982-84=100)	103.3	98.3	97.0	96.7	100.6	101.4	100.6	100.3	104.3	102.8
Farm-retail spread (1982-84=100)	195.4	204.5	210.2	207.2	210.4	213.1	214.6	215.4	213.7	215.4
Farm value-retail cost (%)	22.2	20.6	19.9	20.1	20.5	20.4	20.2	20.1	20.8	20.5
Meat products										
Retail cost (1982-84=100)	141.6	142.3	150.4	147.0	152.5	152.9	154.1	156.5	157.9	158.0
Farm value (1982-84=100)	84.8	81.6	88.4	86.1	90.7	90.7	91.8	92.0	93.2	93.4
Farm-retail spread (1982-84=100)	200.0	204.7	214.0	209.5	215.9	216.7	218.0	222.6	224.3	224.3
Farm value-retail cost (%)	30.3	29	29.8	29.7	30.1	30.1	30.2	29.8	29.9	29.9
Dairy products										
Retail cost (1982-84=100)	150.8	159.6	160.7	160.6	161.4	161.5	163.6	163.6	163.2	163.4
Farm value (1982-84=100)	113.0	107.9	98.8	95.3	102.1	106.1	106.9	105.4	110.8	114.5
Farm-retail spread (1982-84=100)	185.6	207.2	217.7	220.8	216.1	212.6	215.9	217.2	211.5	208.5
Farm value-retail cost (%)	36.0	32.4	29.5	28.5	30.3	31.5	31.3	30.9	32.6	33.6
Poultry										
Retail cost (1982-84=100)	157.1	157.9	159.8	158.5	157.2	160.7	160.8	161.8	162.6	163.1
Farm value (1982-84=100)	126.1	119	117.4	118.2	125.7	114.5	109.9	117.9	126.4	124.0
Farm-retail spread (1982-84=100)	192.9	202.7	208.7	204.9	193.4	213.9	219.4	212.4	204.3	208.1
Farm value-retail cost (%)	42.9	40.3	39.3	39.9	42.8	38.1	36.6	39.0	41.6	40.7
Eggs										
Retail cost (1982-84=100)	137.1	128.1	131.9	129.5	140.4	145.5	150.4	142.9	139.2	144.7
Farm value (1982-84=100)	89.6	74.9	80.6	82.0	100.4	119.3	86.5	87.5	89.0	84.6
Farm-retail spread (1982-84=100)	222.5	223.7	223.9	214.9	212.3	192.6	265.3	242.4	229.3	252.7
Farm value-retail cost (%)	42.0	37.6	39.3	40.7	45.9	52.7	36.9	39.3	41.1	37.5
Cereal and bakery products										
Retail cost (1982-84=100)	181.1	185.0	188.3	187.2	189.0	190.7	191.1	191.9	191.9	192.5
Farm value (1982-84=100)	94.4	82.5	75.2	77.3	79.6	77.4	77.9	79.2	81.4	80.2
Farm-retail spread (1982-84=100)	193.2	199.2	204.0	202.5	204.3	206.5	206.9	207.6	207.3	208.2
Farm value-retail cost (%)	6.4	5.5	4.9	5.1	5.2	5.0	5.0	5.1	5.2	5.1
Fresh fruit										
Retail cost (1982-84=100)	258.2	294.3	284.3	282.2	290.4	297.4	287.7	278.4	282.1	297.7
Farm value (1982-84=100)	141.3	153.7	141.3	151.3	140.5	143.7	147.2	139.0	139.0	141.6
Farm-retail spread (1982-84=100)	312.2	359.3	350.3	342.6	359.6	368.4	352.6	342.8	348.2	369.7
Farm value-retail cost (%)	17.3	16.5	15.7	16.9	15.3	15.3	16.2	15.8	15.6	15.0
Fresh vegetables										
Retail cost (1982-84=100)	215.8	209.3	219.4	213.6	224.6	240.2	235.9	240.6	238.2	232.6
Farm value (1982-84=100)	124.5	118.1	121.4	124.1	126.9	129.2	131.3	120.6	148.3	114.9
Farm-retail spread (1982-84=100)	262.7	256.2	269.8	259.6	274.8	297.3	289.7	302.3	284.4	293.1
Farm value-retail cost (%)	19.6	19.2	18.8	19.7	19.2	18.3	18.9	17.0	21.1	16.8
Processed fruits and vegetables										
Retail cost (1982-84=100)	150.6	154.8	153.6	151.7	152.6	153.8	158	157.5	156.6	156.3
Farm value (1982-84=100)	115.1	113.5	111.0	111.9	110.6	110.3	110.4	110.6	110.8	110.8
Farm-retail spread (1982-84=100)	161.7	167.7	166.9	164.1	165.7	167.4	172.9	172.1	170.9	170.5
Farm value-retail cost (%)	18.2	17.4	17.2	17.5	17.2	17.0	16.6	16.7	16.8	16.9
Fats and oils										
Retail cost (1982-84=100)	146.9	148.3	147.4	144.8	146.5	150.2	153.0	152.6	153.1	151.5
Farm value (1982-84=100)	118.9	89	80.9	88.4	76.2	73.8	72.2	70.9	76.3	72.9
Farm-retail spread (1982-84=100)	157.2	170	171.9	165.5	172.4	178.3	182.7	182.7	181.3	180.4
Farm value-retail cost (%)	21.8	16.2	14.8	16.4	14.0	13.2	12.7	12.5	13.4	12.9

See footnotes at end of table, next page.

Table 8—Farm-Retail Price Spreads (continued)

	Annual			2000	2001					
	1998	1999	2000	Jun	Jan	Feb	Mar	Apr	May	Jun
Beef, all fresh retail value (cents/lb.)	253.3	260.5	275.3	278.6	291.1	296.2	298.5	299.4	301.2	302.3
Beef, Choice										
Retail value (cents/lb.)[2]	277.1	287.8	306.4	311.5	321.4	334.2	334.3	343.2	343.8	347.7
Wholesale value (cents/lb.)[3]	153.8	171.6	182.3	190.7	202.5	201.5	202.7	201.7	204.3	198.3
Net farm value (cents/lb.)[4]	130.8	141.1	149.0	149.2	167.7	171.0	170.0	164.1	160.1	156.2
Farm-retail spread (cents/lb.)	146.3	146.7	157.4	162.3	153.7	163.2	164.3	179.1	183.7	191.5
Wholesale-retail (cents/lb.)[5]	123.3	116.2	124.1	120.8	118.9	132.7	131.6	141.5	139.5	149.4
Farm-wholesale (cents/lb.)[6]	23.0	30.5	33.3	41.5	34.8	30.5	32.7	37.6	44.2	42.1
Farm value-retail value (%)	47.2	49.0	48.6	47.9	52.2	51.2	50.9	47.8	46.6	44.9
Pork										
Retail value (cents/lb.)[2]	242.7	241.5	258.2	260.3	260.6	261.5	265.4	263.3	266.9	270.9
Wholesale value (cents/lb.)[3]	97.3	99.0	114.5	122.1	107.9	107.7	117.3	120.5	126.0	128.4
Net farm value (cents/lb.)[4]	61.2	60.4	79.4	91.7	68.6	73.7	86.0	87.2	93.0	97.0
Farm-retail spread (cents/lb.)	181.5	181.1	178.8	168.6	192.0	187.8	179.4	176.1	173.9	173.9
Wholesale-retail (cents/lb.)[5]	145.4	142.5	143.7	138.2	152.7	153.8	148.1	142.8	140.9	142.5
Farm-wholesale (cents/lb.)[6]	36.1	38.6	35.1	30.4	39.3	34.0	31.3	33.3	33.0	31.4
Farm value-retail value (%)	25.2	25.0	30.8	35.2	26.3	28.2	32.4	33.1	34.8	35.8

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

Table 9—Price Indexes of Food Marketing Costs

	Annual			1999		2000				2001
	1998	1999	2000	III	IV	I	II	III	IV	I
					*1987=100**					
Labor—hourly earnings and benefits	490.4	503.3	514.0	504.2	506.7	508.2	512.0	514.1	521.7	526.5
Processing	499.3	511.4	525.0	513.4	515.6	518.1	523.4	526.9	531.3	533.4
Wholesaling	552.5	564.6	589.4	575.2	580.0	578.9	586.4	587.3	601.0	608.7
Retailing	454.1	465.8	469.9	463.8	465.4	467.1	467.8	465.2	477.2	488.3
Packaging and containers	395.5	399.4	412.0	403.0	407.7	410.3	410.6	413.5	413.7	414.2
Paperboard boxes and containers	365.2	373.0	407.7	380.2	387.8	391.9	413.0	412.4	413.5	412.0
Metal cans	487.9	486.6	452.5	486.6	486.6	489.5	440.1	440.1	440.1	441.5
Paper bags and related products	432.9	440.9	470.4	446.3	455.8	457.3	472.4	477.6	474.5	474.2
Plastic films and bottles	322.8	324.2	336.7	325.9	329.6	329.4	330.6	342.4	344.3	344.0
Glass containers	446.8	447.1	450.8	447.0	445.8	450.1	451.1	451.1	450.8	460.2
Metal foil	232.0	227.3	232.4	226.7	228.0	229.8	231.3	233.8	234.8	235.5
Transportation services	428.3	394.0	394.3	394.2	394.2	392.3	393.3	394.6	396.9	401.0
Advertising	624.5	623.7	635.7	623.9	625.6	633.6	635.0	635.7	638.6	644.3
Fuel and power	619.7	651.5	841.1	681.1	711.9	816.5	822.2	866.1	859.6	830.3
Electric	492.1	489.4	498.2	505.9	488.5	477.2	487.0	523.8	504.9	514.3
Petroleum	457.0	565.9	1,135.8	613.2	758.1	1,114.0	1,102.2	1,160.6	1,166.4	998.5
Natural gas	1,239.4	1,235.6	1,275.4	1,272.7	1,240.4	1,235.3	1,259.8	1,300.7	1,305.7	1,403.3
Communications, water and sewage	307.6	309.3	309.1	308.9	310.6	310.3	307.8	308.7	309.5	312.6
Rent	260.5	256.9	258.2	256.4	256.4	256.8	258.0	259.1	259.0	259.2
Maintenance and repair	529.3	541.6	561.2	542.5	545.3	552.2	558.3	564.7	569.7	574.8
Business services	522.9	531.9	544.6	533.3	536.1	540.3	543.2	545.9	548.8	555.3
Supplies	332.3	327.7	348.5	327.1	331.7	365.6	338.2	344.5	345.8	349.2
Property taxes and insurance	598.3	619.7	654.6	622.8	631.3	639.8	647.4	658.6	672.6	680.9
Interest, short-term	103.7	103.7	115.4	109.7	115.2	111.3	116.6	117.7	116.0	91.0
Total marketing cost index	467.2	472.2	491.5	475.2	479.1	486.7	488.8	493.1	497.1	499.2

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	Production[1]	Imports	Total supply	Exports	Ending stocks	Consumption: Total	Consumption: Per capita[2]	Conversion factor[3]	Primary market price[4]
	Million lbs.[5]							Lbs.		$/cwt
Beef										
1998	465	25,760	2,643	28,868	2,171	393	26,305	68	0.700	61.48
1999	393	26,493	2,874	29,760	2,417	411	26,932	69	0.700	65.56
2000	411	26,888	3,032	30,331	2,516	525	27,290	69	0.700	69.65
2001	525	25,658	3,055	29,238	2,394	390	26,454	67	0.700	76.35
2002	390	25,031	3,075	28,496	2,500	385	25,611	64	0.700	80.00
Pork										
1998	408	19,011	705	20,124	1,230	584	18,309	53	0.776	34.72
1999	584	19,308	827	20,720	1,278	489	18,952	54	0.776	34.00
2000	489	18,952	967	20,408	1,305	477	18,626	52	0.776	44.70
2001	477	19,070	956	20,503	1,443	475	18,585	52	0.776	46.22
2002	475	19,655	1,000	21,130	1,400	500	19,230	53	0.776	43.50
Veal[6]										
1998	8	262	0	270	0	5	265	1	0.83	82
1999	5	235	0	240	0	5	235	1	0.83	90
2000	5	225	0	230	0	5	225	1	0.83	106
2001	5	206	0	211	0	5	206	1	0.83	108
2002	5	200	0	205	0	5	200	1	0.83	111
Lamb and mutton										
1998	14	251	112	377	6	12	360	1	0.89	74
1999	12	248	113	372	5	9	358	1	0.89	76
2000	9	234	129	372	6	13	353	1	0.89	79
2001	13	212	150	375	5	14	356	1	0.89	82
2002	14	196	151	361	4	14	343	1	0.89	83
Total red meat										
1998	894	45,284	3,461	49,639	3,407	994	45,239	123	--	--
1999	994	46,284	3,813	51,092	3,700	914	46,477	125	--	--
2000	914	46,299	4,128	51,341	3,827	1,020	46,494	124	--	--
2001	1,020	45,146	4,161	50,327	3,842	884	45,601	120	--	--
2002	884	45,082	4,226	50,192	3,904	904	45,384	119	--	--
										¢/lb
Broilers										
1998	607	27,612	5	28,225	4,673	711	22,841	73	0.859	63
1999	711	29,468	4	30,183	4,920	796	24,468	77	0.859	58
2000	796	30,209	6	31,011	5,548	798	24,665	77	0.859	56
2001	798	30,474	5	31,276	5,930	700	24,646	76	0.859	59
2002	700	31,163	4	31,867	6,200	740	24,927	77	0.859	61
Mature chickens										
1998	7	525	0	533	426	6	101	1	1.0	--
1999	6	554	0	562	393	8	162	1	1.0	--
2000	8	531	0	541	223	9	308	1	1.0	--
2001	9	516	0	527	80	8	438	1	1.0	--
2002	8	505	0	515	80	10	424	1	1.0	--
Turkeys										
1998	415	5,215	0	5,630	446	304	4,880	18	1.0	62
1999	304	5,230	1	5,535	379	254	4,902	18	1.0	69
2000	254	5,333	1	5,589	458	241	4,889	18	1.0	71
2001	241	5,510	1	5,752	486	250	5,016	18	1.0	68
2002	250	5,625	1	5,876	495	275	5,105	18	1.0	68
Total poultry										
1998	1,029	33,352	6	34,387	5,545	1,022	27,821	91	--	--
1999	1,022	35,252	7	36,281	5,692	1,058	29,531	96	--	--
2000	1,058	36,073	9	37,140	6,229	1,048	29,863	96	--	--
2001	1,048	36,500	8	37,556	6,495	958	30,101	96	--	--
2002	958	37,293	7	38,258	6,775	1,025	30,456	96	--	--
Red meat and poultry										
1998	1,923	78,637	3,467	84,027	8,951	2,016	73,060	214	--	--
1999	2,016	81,537	3,820	87,372	9,392	1,972	76,008	220	--	--
2000	1,972	82,372	4,137	88,481	10,056	2,068	76,357	219	--	--
2001	2,068	81,646	4,169	87,883	10,337	1,842	75,702	216	--	--
2002	1,842	82,375	4,233	88,450	10,679	1,929	75,840	215	--	--

-- = 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: Total	Consumption: Per capita	Primary market price*
	Million doz.								No.	¢/doz.
1995	14.9	6,215.6	4.1	6,234.6	208.9	847.2	11.2	5,167.3	235.6	72.9
1996	11.2	6,350.7	5.4	6,367.3	253.1	863.8	8.5	5,241.8	236.8	88.2
1997	8.5	6,473.1	6.9	6,488.5	227.8	894.7	7.4	5,358.6	240.1	81.2
1998	7.4	6,657.9	5.8	6,671.2	218.8	921.8	8.4	5,522.2	244.9	75.8
1999	8.4	6,912.0	7.4	6,927.8	161.7	941.7	7.6	5,816.7	255.7	65.6
2000	7.6	7,034.9	8.4	7,051.0	171.8	940.2	11.4	5,927.5	258.3	68.9
2001	11.4	7,145.6	7.9	7,164.8	157.4	944.4	10.0	6,053.0	261.4	71.5
2002	10.0	7,270.0	8.0	7,288.0	165.0	970.0	10.0	6,143.0	263.2	68.0

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[1]

	Commercial: Production	Farm use	Commercial: Farm marketings	Commercial: Beg. stocks	Imports	Total commercial supply	Commercial: CCC net removals	Commercial: Ending stocks	Commercial: Disappearance	All milk price[1]	CCC net removals: Skim solids basis	CCC net removals: Total solids basis
	Million lbs. (milkfat basis)									$/cwt	Billion lbs.	
1994	153.6	1.7	151.9	4.5	2.9	159.3	4.8	4.3	150.3	12.97	3.7	4.2
1995	155.3	1.6	153.7	4.3	2.9	160.9	2.1	4.1	154.9	12.74	4.4	3.5
1996	154.0	1.5	153.5	4.1	2.9	159.5	0.1	4.7	154.7	14.74	0.7	0.5
1997	156.1	1.4	154.7	4.7	2.7	162.1	1.1	4.9	156.1	13.34	3.7	2.7
1998	157.4	1.4	156.1	4.9	4.6	165.5	0.4	5.3	159.9	15.42	4.0	2.6
1999	162.7	1.4	161.3	5.3	4.7	171.4	0.3	6.1	164.9	14.36	6.5	4.0
2000	167.7	1.3	166.3	6.1	4.4	176.9	0.8	6.9	169.2	12.40	8.6	5.5
2001	165.7	1.3	164.4	6.8	4.8	176.0	0.2	6.2	169.7	15.30	5.7	3.5
2002	169.9	1.2	168.7	6.2	4.7	179.6	0.2	6.4	172.9	13.70	1.9	1.2

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: 1998	Annual: 1999	Annual: 2000	2000: May	2000: Dec	2001: Jan	2001: Feb	2001: Mar	2001: Apr	2001: May
Broilers										
Federally inspected slaughter certified (mil. lb.)	27,862.7	29,741.4	30,495.2	2,741.7	2,357.7	2,621.1	2,322.2	2,604.2	2,491.8	2,805.1
Wholesale price, 12-city (cents/lb.)	63.0	58.1	56.2	55.7	57.2	56.9	57.5	59.0	58.5	59.4
Price of grower feed ($/ton)	128.6	103.1	104.7	117.2	107.7	106.3	102.8	103.1	98.7	98.8
Broiler-feed price ratio[1]	6.3	7.2	6.6	5.8	6.5	6.4	7.2	7.9	7.9	8.1
Stocks beginning of period (mil. lb.)	606.8	711.1	795.6	847.0	750.1	797.6	773.2	676.6	636.5	647.0
Broiler-type chicks hatched (mil.)	8,491.9	8,715.4	8,792.1	775.0	738.7	733.9	670.5	763.5	745.3	775.7
Turkeys										
Federally inspected slaughter certified (mil. lb.)	5,280.6	5,296.5	5,402.2	492.3	403.4	458.2	407.8	466.5	425.7	486.5
Wholesale price, Eastern U.S. 8-16 lb. young hens (cents/lb.)	62.2	69.0	70.5	69.2	70.3	61.5	61.2	62.4	63.5	65.7
Price of turkey grower feed ($/ton)	115.6	95.0	95.9	104.6	100.0	100.3	96.8	96.4	93.3	94.6
Turkey-feed price ratio[1]	6.7	8.6	8.7	7.8	8.1	7.3	7.5	7.7	8.1	8.1
Stocks beginning of period (mil. lb.)	415.1	304.3	254.3	416.9	261.1	241.3	289.1	333.5	355.4	392.6
Poults placed in U.S. (mil.)	297.8	296.1	297.3	25.8	23.3	25.6	23.7	26.1	25.9	26.8
Eggs										
Farm production (mil.)	79,927.0	82,943.0	84,412.0	7,104.0	7,279.0	7,217.0	6,519.0	7,331.0	7,090.0	7,231.0
Average number of layers (mil.)	313.0	322.9	328.2	326.3	332.0	333.3	335.5	336.6	336.8	334.7
Rate of lay (eggs per layer on farms)	255.3	256.8	257.2	21.8	21.9	21.7	19.4	21.8	21.1	21.6
Cartoned price, New York, grade A large (cents/doz.)[2]	75.8	65.6	68.9	53.5	94.9	76.2	71.5	79.6	74.4	58.1
Price of laying feed ($/ton)	137.7	124.5	123.9	162.5	111.1	123.3	119.6	118.1	115.7	131.7
Egg-feed price ratio[1]	9.8	9.8	10.6	6.4	15.0	10.9	11.4	11.7	11.5	8.4
Stocks, first of month Frozen (mil. doz.)	7.4	8.4	7.6	9.7	11.7	11.4	12.9	11.7	11.1	12.1
Replacement chicks hatched (mil.)	438.3	451.7	429.7	41.2	34.7	38.0	38.2	40.1	41.7	42.6

1. Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2. 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	May	Dec	Jan	Feb	Mar	Apr
Class III (BFP before 2000) 3.5% fat ($/cwt.)	14.20	12.43	9.74	9.37	9.37	9.99	10.27	11.42	12.06
Wholesale prices									
Butter, Central States (cents/lb.)[1]	177.6	125.2	118.5	122.2	150.0	122.2	138.1	154.9	174.7
Am. cheese, Wis. assembly pt. (cents/lb.)	158.1	142.3	116.2	110.6	113.0	110.2	120.0	131.9	140.5
Nonfat dry milk (cents/lb.)[2]	106.9	103.5	101.6	100.1	104.3	103.6	103.2	103.1	104.3
USDA net removals									
Total (mil. lb.)[3]	365.6	343.5	841.4	107.3	49.0	30.6	22.6	14.3	10.7
Butter (mil. lb.)	6.3	3.7	8.9	0.8	0.0	0.0	0.0	0.0	0.0
Am. cheese (mil. lb.)	8.2	4.6	28.0	4.6	4.2	1.6	1.2	0.0	0.0
Nonfat dry milk (mil. lb.)	326.4	540.6	692.6	81.8	44.8	70.6	50.9	66.9	48.5
Milk									
Milk prod. 20 states (mil. lb.)	134,900	140,062	144,528	12,758	11,855	12,062	11,112	12,401	12,158
Milk per cow (lb.)	17,502	18,109	18,532	1,636	1,519	1,550	1,431	1,599	1,570
Number of milk cows (1,000)	7,708	7,734	7,799	7,799	7,803	7,783	7,767	7,756	7,744
U.S. milk production (mil. lb.)[4]	157,348	162,716	167,658	14,792	13,752	14,010	12,902	14,394	14,081
Stocks, beginning[3]									
Total (mil. lb.)	4,907	5,301	6,186	10,009	6,996	7,010	7,887	8,375	8,571
Commercial (mil. lb.)	4,889	5,274	6,142	9,927	6,862	6,871	7,706	8,167	8,325
Government (mil. lb.)	18	27	44	82	134	139	181	208	246
Imports, total (mil. lb.)[3]	4,588	4,772	4,445	412	352	433	337	354	493
Commercial disappearance (mil. lb.)[3]	159,779	164,947	169,222	14,558	13,935	13,438	12,656	14,468	14,034
Butter									
Production (mil. lb.)	1,168.0	1,277.1	1,273.6	108.9	111.6	129.4	110.2	101.9	106.0
Stocks, beginning (mil. lb.)	20.5	25.9	24.9	126.6	27.1	24.0	63.3	81.0	89.7
Commercial disappearance (mil. lb.)	1,222.5	1,310.7	1,297.6	100.3	115.4	92.1	95.7	97.8	96.0
American cheese									
Production (mil. lb.)	3,314.7	3,532.6	3,633.9	322.3	303.4	301.1	274.8	299.5	294.3
Stocks, beginning (mil. lb.)	410.3	407.6	458.0	569.7	521.8	521.1	508.1	503.1	503.3
Commercial disappearance (mil. lb.)	3,338.6	3,542.2	3,588.1	315.7	303.1	321.1	282.4	302.6	294.3
Other cheese									
Production (mil. lb.)	4,177.5	4,361.5	4,620.6	408.1	385.0	385.5	357.4	414.6	380.7
Stocks, beginning (mil. lb.)	70.0	109.5	163.3	224.3	173.4	185.2	202.9	218.1	211.1
Commercial disappearance (mil. lb.)	4,452.0	4,672.1	4,963.3	429.4	408.8	385.4	363.0	447.9	413.1
Nonfat dry milk									
Production (mil. lb.)	1,135.4	1,359.7	1,451.6	137.9	121.4	116.7	132.4	121.0	131.3
Stocks, beginning (mil. lb.)	103.3	56.9	150.9	231.5	133.3	146.3	145.5	137.7	123.4
Commercial disappearance (mil. lb.)	866.9	737.2	770.4	62.2	64.5	46.9	89.3	68.4	79.5
Frozen dessert									
Production (mil. gal.)[5]	1,324.3	1,301.0	1,312.2	127.9	78.9	90.7	97.3	115.4	119.2

	Annual			1999	2000				20
	1998	1999	2000	IV	I	II	III	IV	I
Milk production (mil. lb.)	157,348	162,716	167,658	40,440	42,630	43,189	41,161	40,678	41,306
Milk per cow (lb.)	17,189	17,772	18,204	4,410	4,640	4,688	4,460	4,416	4,511
No. of milk cows (1,000)	9,154	9,156	9,210	9,171	9,188	9,213	9,229	9,211	9,157
Milk-feed price ratio	1.97	2.03	1.75	1.99	1.68	1.67	1.84	1.81	--
Returns over concentrate costs ($/cwt milk)	12.15	11.40	9.40	10.95	8.95	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			1999	2000				2001	
	1998	1999	2000	IV	I	II	III	IV	I	II
U.S. wool price (¢/lb.)[1]	162	110	107	98	97	120	117	96	101	130
Imported wool price (¢/lb.)[2]	164	136	137	125	133	139	139	136	151	155
U.S. mill consumption, scoured										
Apparel wool (1,000 lb.)	98,373	65,468	60,294	13,633	17,142	15,655	14,184	13,914	16,590	--
Carpet wool (1,000 lb.)	16,331	15,017	14,514	2,966	3,784	3,327	3,650	3,886	4,278	--

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

Table 16—Meat Animals

	Annual			2000	2001					
	1998	1999	2000	Jun	Jan	Feb	Mar	Apr	May	Jun
Cattle on feed (7 states, 1000+ head capacity)										
Number on feed (1,000 head)[1]	9,455	9,021	9,752	9,441	10,176	10,222	10,012	9,859	9,563	9,660
Placed on feed (1,000 head)	19,697	21,446	21,875	1,413	1,965	1,331	1,530	1,324	2,060	1,690
Marketings (1,000 head)	19,440	20,124	20,644	1,848	1,751	1,477	1,603	1,546	1,875	1,824
Other disappearance (1,000 head)	691	676	907	37	68	64	80	74	88	60
Market prices ($/cwt)										
Slaughter cattle										
Choice steers, 1,100-1,300 lb.										
Texas	61.75	65.89	69.86	69.41	78.79	79.40	79.44	76.50	74.93	72.64
Neb. direct	61.47	65.56	69.65	69.59	78.46	79.71	79.80	75.92	75.39	72.81
Boning utility cows, Sioux Falls	36.20	38.40	41.71	45.38	41.75	43.34	46.10	45.56	44.90	50.00
Feeder steers										
Medium no. 1, Oklahoma City										
600-650 lb.	78.13	82.64	94.36	95.30	92.96	97.67	99.14	103.93	97.02	98.87
750-800 lb.	71.79	76.39	88.58	86.71	87.23	86.05	87.19	89.29	88.00	91.12
Slaughter hogs										
Barrows and gilts, 51-52 percent lean										
National Base converted to live equal.	34.72	34.00	34.02	51.48	38.61	41.47	48.41	49.28	52.34	54.53
Sows, Iowa, S.MN 1-2 300-400 lb.	20.29	19.26	29.79	33.70	27.89	29.48	34.37	39.38	38.44	41.88
Slaughter sheep and lambs										
Lambs, Choice, San Angelo	74.20	75.96	79.40	78.30	81.25	87.00	82.63	83.30	86.07	75.21
Ewes, Good, San Angelo	40.86	42.45	46.23	44.68	51.88	56.75	56.94	47.15	47.00	43.89
Feeder lambs										
Choice, San Angelo	79.86	80.74	95.86	91.14	109.63	117.00	115.44	112.90	99.43	81.29
Wholesale meat prices, Midwest										
Boxed beef cut-out value										
Choice, 700-800 lb.	98.60	110.90	117.45	126.00	128.00	129.53	130.92	127.08	130.13	127.85
Select, 700-800 lb.	92.19	101.99	101.99	111.19	121.70	125.01	127.44	120.62	114.90	113.42
Canner and cutter cow beef	61.49	66.51	72.57	73.60	--	--	--	--	--	--
Pork cutout	53.08	53.45	64.07	68.49	58.62	61.47	70.98	70.39	71.86	75.33
Pork loins, bone-in, 1/4 " trim,14-19 lb.	101.63	100.38	117.13	115.38	110.80	114.32	128.53	117.98	130.72	132.51
Pork bellies, 12-14 lb.	52.38	57.12	77.46	97.85	66.61	66.68	78.04	85.80	77.91	91.45
Hams, bone-in, trimmed, 20-23 lb.	45.85	45.18	52.02	52.11	43.86	54.38	59.94	54.59	57.28	60.96
All fresh beef retail price	253.28	260.50	275.30	278.60	291.10	296.20	298.50	299.40	301.20	302.30
Commercial slaughter (1,000 head)[2]										
Cattle	35,465	36,150	36,247	3,237	3,002	2,580	2,918	2,714	3,199	3,120
Steers	17,428	17,932	18,060	1,676	1,423	1,210	1,417	1,340	1,630	1,585
Heifers	11,448	11,868	12,041	1,041	979	870	953	885	1,026	1,036
Cows	5,983	5,710	5,522	464	549	454	494	440	486	445
Bull and stags	606	639	624	56	51	46	54	49	58	54
Calves	1,458	1,282	1,132	95	91	79	84	74	79	77
Sheep and lambs	3,804	3,701	3,455	260	269	245	326	290	239	233
Hogs	101,029	101,544	97,955	7,952	8,643	7,604	8,327	7,832	7,958	7,483
Barrows and gilts	97,025	97,732	94,585	7,654	8,339	7,352	8,026	7,554	7,668	7,211
Commercial production (mil. lb.)										
Beef	25,653	26,386	26,776	2,341	2,205	1,883	2,116	1,939	2,293	2,269
Veal	252	226	216	17	18	16	16	15	16	16
Lamb and mutton	248	244	230	17	19	17	23	20	17	16
Pork	18,981	19,278	18,905	1,517	1,693	1,486	1,626	1,532	1,555	1,457

	Annual			2000				2001		
	1998	1999	2000	I	II	III	IV	I	II	III
Hogs and pigs (U.S.)[3]										
Inventory (1,000 head)[1]	61,158	62,206	59,342	59,342	57,782	59,117	59,495	59,138	58,524	59,081
Breeding (1,000 head)[1]	6,957	6,682	6,234	6,234	6,190	6,234	6,246	6,270	6,244	6,198
Market (1,000 head)[1]	54,200	55,523	53,109	53,109	51,593	52,884	53,250	52,868	52,280	52,883
Farrowings (1,000 head)	12,061	11,641	11,462	2,798	2,885	2,889	2,848	2,825	2,878	2,924
Pig crop (1,000 head)	105,004	102,354	101,354	24,522	25,565	25,548	25,208	24,776	25,544	--
Cattle on Feed, 7 states (1,000 head)[1,4]										
Steers and steer calves	5,803	5,432	5,432	5,768	5,746	5,326	5,584	5,936	5,885	5,521
Heifers and heifer calves	3,615	3,552	3,552	3,942	3,810	3,602	3,877	4,081	3,913	3,894
Cows and bulls	59	37	37	42	37	31	41	59	61	51

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

Crops & Products

Table 17—Supply & Utilization[1,2]

	Area												
	Set-aside[3]	Planted	Harvested	Yield	Production	Total supply[4]	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price[5]
	Mil. acres			*Bu./acre*				*Mil. bu.*				*$/bu.*
Wheat												
1997/98	--	70.4	62.8	39.5	2,481	3,020	251	1,007	1,040	2,298	722	3.38
1998/99	--	65.8	59.0	43.2	2,547	3,373	394	990	1,042	2,427	946	2.65
1999/00	--	62.7	53.8	42.7	2,299	3,339	284	1,016	1,090	2,390	950	2.48
2000/01*	--	62.5	53.0	41.9	2,223	3,263	285	1,040	1,065	2,390	873	2.62
2001/02*	--	59.6	49.3	40.0	1,974	2,942	225	1,057	1,050	2,332	610	2.70-3.30
	Mil. acres			*Lb./acre*				*Mil. cwt (rough equiv)*				*$/cwt*
Rice[6]												
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	88.9	210.7	27.5	5.93
2000/01*	--	3.1	3.0	6,281.0	190.9	228.8	--	6/ 121.5	83.0	204.5	24.3	5.55
2001/02*	--	3.3	3.2	6,019.0	194.0	229.1	--	6/ 123.9	81.0	204.9	24.2	5.15-5.65
	Mil. acres			*Bu./acre*				*Mil. bu.*				*$/bu.*
Corn												
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	5,471	1,846	1,981	9,298	1,787	1.94
1999/00	--	77.4	70.5	133.8	9,431	11,232	5,664	1,913	1,937	9,515	1,718	1.82
2000/01*	--	79.5	72.7	137.1	9,968	11,693	5,850	1,965	1,825	9,640	2,053	1.80-1.90
2001/02*	--	76.1	69.3	137.0	9,495	11,563	5,725	2,035	1,975	9,735	1,828	1.75-2.15
	Mil. acres			*Bu./acre*				*Mil. bu.*				$/bu.
Sorghum												
1997/98	--	10.1	9.2	69.2	634	681	365	55	212	632	49	2.21
1998/99	--	9.6	7.7	67.3	520	569	262	45	197	504	65	1.66
1999/00	--	9.3	8.5	69.7	595	660	284	55	256	595	65	1.57
2000/01*	--	9.2	7.7	60.9	470	535	235	35	230	500	35	1.75-1.85
2001/02*	--	9.7	8.9	69.4	615	650	275	60	250	585	65	1.60-2.00
	Mil. acres			*Bu./acre*				*Mil. bu.*				*$/bu.*
Barley												
1997/98	--	6.7	6.2	58.1	360	510	144	172	74	390	119	2.38
1998/99	--	6.3	5.9	60.0	352	501	161	170	28	360	142	1.98
1999/00	--	5.2	4.7	59.2	280	450	136	172	30	338	111	2.13
2000/01*	--	5.8	5.2	61.1	318	457	121	172	58	351	106	2.15
2001/02*	--	5.1	4.5	58.4	264	405	100	172	30	302	103	2.00-2.40
	Mil. acres			*Bu./acre*				*Mil. bu.*				*$/bu.*
Oats												
1997/98	--	5.1	2.8	59.5	167	332	185	72	2	258	74	1.60
1998/99	--	4.9	2.8	60.2	166	348	196	69	2	266	81	1.10
1999/00	--	4.7	2.5	59.6	146	326	180	68	2	250	76	1.12
2000/01*	--	4.5	2.3	64.2	149	335	193	68	2	263	73	1.10
2001/02*	--	4.4	2.2	60.5	132	310	165	68	2	235	75	0.95-1.35
	Mil. acres			*Bu./acre*				*Mil. bu.*				*$/bu.*
Soybeans[7]												
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	1,579	973	2.716	290	4.63
2000/01*	--	74.5	72.7	38.1	2,770	3,063	188	1,625	995	2,808	255	4.50
2001/02*	--	75.4	74.3	39.5	2,935	3,194	174	1,660	1,015	2,849	345	4.00-5.00
								Mil. lbs.				*¢/lb.*
Soybean oil												
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	--	--	--	--	17,824	19,427	--	16,055	1,376	17,432	1,995	15.60
2000/01*	--	--	--	--	18,265	20,340	--	16,450	1,500	17,950	2,390	13.75
2001/02*	--	--	--	--	18,730	21,200	--	16,800	2,250	19,050	2,150	14.50-17.50
								1,000 tons				*$/ton[8]*
Soybean meal												
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	--	--	--	--	37.623	38,003	--	30,378	7,331	37,710	293	167.7
2000/01*	--	--	--	--	39,042	39,375	--	31,450	7,650	39,100	275	170.0
2001/02*	--	--	--	--	39,800	40,125	--	32,200	7,650	39,850	275	150-175

See footnotes at end of table, next page

Table 17—Supply & Utilization (continued)

	Area											
	Set-aside [3]	Planted	Harvested	Yield	Production	Total supply [4]	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price [5]
	Mil. acres			*Lb./acre*		*Mil. bales*						*¢/lb.*
Cotton[9]												
1997/98	1.7	13.9	13.4	673	18.8	22.8	--	11.3	7.5	18.8	3.9	65.2
1998/99	0.3	13.4	10.7	625	13.9	18.2	--	10.4	4.3	14.7	3.9	60.2
1999/00	--	14.9	13.4	607	17.0	21.0	--	10.2	6.8	17.0	3.9	45.0
2000/01*	--	15.5	13.1	632	17.2	21.1	--	8.9	6.7	17.0	5.6	51.8
2001/02*	--	16.3	14.4	640	19.2	24.8	--	9.3	9.0	18.3	5.0	--

-- = Not available or not applicable. *July 11, 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 soymeal and soyoil. 2. Conversion factors: hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, and 4.59 480-pound bales of cotton. 3. Includes diversion, acreage reduction, 0/92 & 50/92 programs. 0/92 & 50/92 set-aside includes idled acreage and acreage planted to minor oilseeds, sesame, and crambe. 4. Includes imports. 5. Marketing-year weighted average price received by farmers. Does not include an allowance for loans outstanding and government purchases. 6. Residual included in domestic use. 7. Includes seed. 8. Simple average of 48 percent protein, Decatur. 9. Upland and extra-long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply and use estimates and changes in ending stocks. Average for August 2000-February 2001. USDA is prohibited by law from publishing cotton price projections. *Information contact: Mae Dean Johnson (202) 694-5299*

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

	Marketing year[1]			2000	2001					
	1997/98	1998/99	1999/2000	Jun	Jan	Feb	Mar	Apr	May	Jun
Wheat, no. 1 HRW, Kansas City ($/bu.)[2]	3.71	3.08	2.87	3.07	3.54	3.35	3.45	3.41	3.49	3.32
Wheat, DNS, Minneapolis ($/bu.)[3]	4.31	3.83	3.65	3.78	3.79	3.68	3.63	3.73	3.88	3.81
Rice, S.W. La. ($/cwt)[4]	18.92	16.79	12.99	11.47	12.75	12.75	12.72	12.60	12.47	12.38
Corn, no. 2 yellow, 30-day, Chicago ($/bu.)	2.56	2.06	1.97	2.01	2.03	1.99	2.07	2.04	1.96	1.89
Sorghum, no. 2 yellow, Kansas City ($/cwt)	4.11	3.29	3.10	3.18	3.64	3.63	3.56	3.56	3.56	3.56
Barley, feed, Duluth ($/bu.)	1.90	--	--	--	1.54	1.51	1.50	1.50	1.50	1.50
Barley, malting Minneapolis ($/bu.)	2.50	--	--	--	--	2.40	2.37	2.35	2.41	--
U.S. cotton price, SLM, 1-1/16 in. (¢/lb.)[5]	67.79	60.12	60.20	54.97	56.66	54.10	47.22	42.19	40.02	37.38
Northern Europe prices cotton index (¢/lb.)[6]	72.11	58.97	52.85	59.56	64.19	60.88	54.75	51.24	49.76	47.33
U.S. M 1-3/32 in. (¢/lb.)[7]	77.98	74.08	59.64	--	69.75	68.63	61.25	55.50	52.90	51.44
Soybeans, no. 1 yellow, 15-day[8] Central Illinois ($/bu)	6.51	4.85	4.76	5.06	4.63	4.49	4.42	4.29	4.47	4.69
Soybean oil, crude, Decatur (¢/lb.)	25.84	19.90	20.50	14.20	13.50	12.38	13.90	12.38	13.53	12.38
Soybean meal, 48% protein, Decatur ($/ton)	185.54	138.50	165.45	187.05	187.99	165.35	162.53	166.08	171.48	183.35

-- = 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 soymeal 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 prices of 13 selected growths. 7. Cotton, Memphis territory growths. 8. Soybean 30-day price discountinued. *Information contact: Mae Dean Johnson (202) 694-5299*

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

	Marketing assistance loan rate	Marketing loan benefit[1]	Flexibility contract payment rate	Acres under contract	Contract payment yields	Participation rate[2]
		$/bu.		Mil. acres	Bu./acre	Percent
Wheat						
1996/97	2.58	--	0.874	76.7	34.70	99
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[3]	2.58	--	0.588	78.9	34.50	--
		$/cwt			Cwt/acre	
Rice						
1996/97	6.50	--	2.766	4.2	48.27	99
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[3]	6.50	--	2.600	4.1	48.15	--
		$/bu.			Bu./acre	
Corn						
1996/97	1.89	--	0.251	80.7	102.90	98
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[3]	1.89	--	0.334	81.9	102.60	--
		$/bu.			Bu./acre	
Sorghum						
1996/97	1.81	--	0.323	13.1	57.30	99
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[3]	1.71	--	0.400	13.6	57.00	--
		$/bu.			Bu./acre	
Barley						
1996/97	1.55	--	0.332	10.5	47.30	99
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[3]	1.62	--	0.251	11.2	46.60	--
		$/bu.			Bu./acre	
Oats						
1996/97	1.03	--	0.033	6.2	50.80	97
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[3]	1.16	--	0.028	6.5	50.60	--
		$/bu.			Bu./acre	
Soybeans[4]						
1996/97	4.97	--	--	--	--	--
1997/98	5.26	0.01	--	--	--	--
1998/99	5.26	0.45	--	--	--	--
1999/2000	5.26	0.88	--	--	--	--
2000/2001[3]	5.26	--	--	--	--	--
		¢/lb.			Lb./acre	
Upland cotton						
1996/97	51.92	--	8.882	16.2	610.00	99
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[3]	51.92	--	7.330	16.3	604.00	--

-- = 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. Participation rate is the percent of eligible acres that entered production flexibility contracts. 3. Estimated payment rates and acres under contract. 4. There are no flexibility contract payments for soybeans.

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

Table 20—Fruit

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Citrus[1]										
Production (1,000 tons)	11,285	12,452	15,274	14,561	15,799	15,712	17,270	17,770	13,633	17,403
Per capita consumpt. (lb.)[2]	19.1	24.4	26.0	25.0	24.1	25.0	27.0	27.1	20.7	--
Noncitrus[3]										
Production (1,000 tons)	15,740	17,124	16,554	17,339	16,348	16,103	18,382	16,560	17,331	18,217
Per capita consumpt. (lb.)[2]	70.5	73.7	73.8	75.6	73.6	73.9	73.1	76.4	81.3	--

	2000				2001					
	Jun	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Grower prices										
Apples (¢/pound)[4]	16.3	21.8	18.5	18.1	16.1	15.2	14.2	15.8	15.4	15.3
Pears (¢/pound)[4]	11.20	18.10	16.15	15.05	17.00	12.55	13.70	15.20	18.20	19.95
Oranges ($/box)[5]	4.70	1.09	3.16	2.94	2.82	3.29	4.13	5.02	4.80	4.30
Grapefruit ($/box)[5]	2.73	5.17	3.09	2.20	1.87	2.07	1.53	1.36	1.94	5.27
Stocks, ending										
Fresh apples (mil. lb.)	832	6,348	5,633	5,003	4,102	3,408	2,603	1,891	1,338	--
Fresh pears (mil. lb.)	28	426	426	339	250	181	113	55	--	--
Frozen fruits (mil. lb.)	1,120	1,626	1,602	1,569	1,471	1,372	1,270	1,122	--	--
Frozen conc.orange juice (mil. single-strength gallons)	832	477	491	564	657	745	708	768	767	--

-- = Not available. 1. Year shown is when harvest concluded. 2. Fresh per capita consumption. 3. Calendar year. 4. Fresh use. 5. U.S. equivalent on-tree returns. *Information contact: Susan Pollack (202) 694-5251*

Table 21—Vegetables

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Production[1]										
Total vegetables (1,000 cwt)	565,754	689,070	692,022	785,798	751,715	765,645	763,532	732,803	834,654	798,773
Fresh (1,000 cwt)[2,4]	242,733	389,597	390,528	416,173	397,125	412,010	436,459	420,012	450,715	454,990
Processed (tons)[3,4]	16,151,030	14,973,630	15,074,707	18,481,238	17,729,497	17,681,732	16,353,639	15,639,548	19,196,942	17,189,152
Mushrooms (1,000 lbs)[5]	746,832	776,357	750,799	782,340	777,870	776,677	808,678	847,760	854,394	--
Potatoes (1,000 cwt)	417,622	425,367	430,349	469,425	445,099	499,254	467,091	475,771	478,216	515,964
Sweet potatoes (1,000 cwt)	11,203	12,005	11,027	13,380	12,821	13,216	13,327	12,382	12,234	13,794
Dry edible beans (1,000 cwt)	33,765	22,615	21,862	28,950	30,689	27,912	29,370	30,418	33,085	26,440

	2000					2001				
	May	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Shipments (1,000 cwt)										
Fresh	33,466	16,413	18,197	21,417	19,925	14,775	23,799	20,494	23,645	37,308
Iceberg lettuce	3,831	3,330	3,505	3,193	3,150	2,168	3,517	3,270	3,017	4,626
Tomatoes, all	4,535	2,778	3,164	3,195	3,699	2,602	4,892	3,495	4,294	4,189
Dry-bulb onions	4,113	4,611	4,473	4,023	3,716	2,628	3,774	2,983	3,819	4,563
Others[6]	20,987	5,694	7,055	11,006	9,360	7,377	11,616	10,746	12,515	23,930
Potatoes, all	18,773	13,020	12,433	14,159	14,897	10,001	15,572	14,624	18,926	21,139
Sweet potatoes	196	301	325	815	437	183	327	242	310	239

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

Table 22—Other Commodities

	Annual			1999	2000				2001	
	1998	1999	2000	IV	I	II	III	IV	I	II
Sugar										
Production[1]	7,891	9,083	8,912	4,667	2,681	922	772	4,537	2,660	--
Deliveries[1]	9,851	10,167	10,091	2,609	2,348	2,513	2,641	2,589	2,399	--
Stocks, ending[1]	3.423	3.855	4.338	3.855	4.551	3.498	2.219	4.338	5.122	--
Coffee										
Composite green price[2] N.Y. (¢/lb.)	114.43	88.49	71.94	91.79	85.66	75.78	66.73	59.63	54.95	51.97

	Annual			2000						
	1997	1998	1999	Mar	Apr	May	Jun	Jul	Aug	Sep
Tobacco										
Avg. price to grower[3]										
Flue-cured ($/lb.)	1.73	1.76	1.74	--	--	--	--	--	1.69	1.82
Burley ($/lb.)	1.91	1.90	1.90	1.77	--	--	--	--	--	--
Domestic taxable removals										
Cigarettes (bil.)	471.4	457.9	432.6	38.8	29.3	40.8	39.6	34.2	40.8	33.1
Large cigars (mil.)[4]	3,552	3,721	3,844	333.9	314.0	345.7	365.8	319.6	352.7	314.4

-- = Not available. 1. 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2. Net imports of green and processed coffee. 3. Crop year July-June for flue-cured, October-September for burley. 4. Includes imports of large cigars. *Information contacts: sugar and coffee, Fannye 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
					Million nits					
Wheat										
Area (hectares)	222.9	221.9	214.5	218.7	230.0	228.0	224.7	216.9	217.9	215.3
Production (metric tons)	562.1	558.6	524.0	538.4	581.9	609.2	588.8	586.8	578.5	567.8
Exports (metric tons)[1]	113.1	101.6	101.5	99.1	100.1	104.0	101.9	112.4	103.0	107.3
Consumption (metric tons)[2]	549.8	556.2	546.9	548.4	575.8	583.7	585.2	593.6	588.6	592.6
Ending stocks (metric tons)[3]	170.0	172.4	149.4	139.5	145.6	171.1	174.6	167.8	157.8	133.0
Coarse grains										
Area (hectares)	325.9	318.7	324.0	313.9	322.7	311.1	307.5	301.1	297.0	300.8
Production (metric tons)	871.6	798.9	871.3	802.9	908.5	884.1	890.4	877.4	856.5	877.7
Exports (metric tons)[1]	93.4	86.3	98.4	87.9	91.2	85.6	96.4	104.1	100.3	98.2
Consumption (metric tons)[2]	844.9	838.6	859.6	841.8	875.0	873.5	870.6	883.7	873.1	892.4
Ending stocks (metric tons)[3]	218.7	179.0	190.6	151.8	185.3	195.9	215.7	209.4	192.9	178.1
Rice, milled										
Area (hectares)	146.4	144.9	147.4	148.1	149.7	151.3	152.4	155.0	151.9	151.6
Production (metric tons)	355.7	355.4	364.5	371.4	380.2	386.8	394.0	408.2	395.5	395.7
Exports (metric tons)[1]	14.9	16.5	21.0	19.7	18.9	27.7	24.9	22.9	22.3	22.1
Consumption (metric tons)[2]	358.6	359.3	366.1	372.4	379.0	379.5	387.3	398.5	401.0	405.7
Ending stocks (metric tons)[3]	123.9	120.0	118.4	117.8	119.0	126.3	133.0	142.7	137.2	127.2
Total grains										
Area (hectares)	695.2	685.5	685.9	680.7	702.4	690.4	684.6	673.0	666.8	667.7
Production (metric tons)	1,789.4	1,712.9	1,759.8	1,712.7	1,870.6	1,880.1	1,873.2	1,872.4	1,830.5	1,841.2
Exports (metric tons)[1]	221.4	204.4	220.9	206.7	210.2	217.3	223.2	239.4	225.6	227.6
Consumption (metric tons)[2]	1,753.3	1,754.1	1,772.6	1,762.6	1,829.8	1,836.7	1,843.1	1,875.8	1,862.7	1,890.7
Ending stocks (metric tons)[3]	512.6	471.4	458.4	409.1	449.9	493.3	523.3	519.9	487.9	438.3
Oilseeds										
Crush (metric tons)	184.4	190.1	208.1	217.5	216.7	226.3	240.6	247.6	251.8	260.8
Production (metric tons)	227.5	229.4	261.9	258.9	261.4	286.5	294.7	303.0	309.7	318.8
Exports (metric tons)	38.2	38.7	44.1	44.3	49.6	54.0	54.9	64.2	68.2	68.9
Ending stocks (metric tons)	23.6	20.3	27.2	22.2	19.1	28.6	31.8	33.8	32.9	32.1
Meals										
Production (metric tons)	125.2	131.7	142.1	147.3	147.8	153.8	164.5	168.8	173.8	180.2
Exports (metric tons)	40.8	44.9	46.7	49.8	50.7	52.1	54.0	56.2	55.6	56.6
Oils										
Production (metric tons)	61.1	63.7	69.6	73.1	73.7	75.1	80.6	85.8	88.3	90.3
Exports (metric tons)	21.3	24.3	27.1	26.0	28.3	29.7	31.5	32.8	34.5	34.9
Cotton										
Area (hectares)	32.6	30.7	32.2	35.9	33.8	33.7	33.0	32.3	31.9	34.1
Production (bales)	82.5	77.1	86.0	93.1	89.6	91.7	85.0	87.3	88.0	94.6
Exports (bales)	25.5	26.8	28.4	27.3	28.8	26.1	25.0	28.4	26.7	28.8
Consumption (bales)	85.9	85.4	84.7	86.0	88.0	87.2	85.4	91.9	91.7	92.7
Ending stocks (bales)	34.7	26.8	29.8	36.7	40.1	43.8	45.0	41.2	37.8	40.0
	1992	1993	1994	1995	1996	1997	1998	1999	2000 E	2001 F
Beef and Pork[4]										
Production (metric tons)	111.6	111.6	116.7	122.1	116.6	122.1	127.1	130.4	131.8	133.1
Consumption (metric tons)	109.9	110.6	115.7	120.7	114.1	119.7	124.6	128.4	129.8	131.3
Exports (metric tons)[1]	6.6	6.6	7.2	7.4	7.7	8.2	8.0	9.2	9.1	8.8
Poultry[4]										
Production (metric tons)	38.0	40.5	43.2	47.5	50.4	52.7	53.5	56.5	58.0	59.6
Consumption (metric tons)	37.0	39.4	42.0	47.0	49.6	51.8	52.6	55.3	56.8	58.5
Exports (metric tons)[1]	2.4	2.8	3.6	4.5	5.1	5.6	5.7	6.0	6.6	6.8
Dairy										
Milk production (metric tons)[5]	--	--	--	--	364.3	365.6	368.0	371.6	375.7	378.8

-- = Not available. E = Estimated, F = forecast. 1. Excludes intra-EU trade but includes intra-FSU trade. 2. Where stocks data are not available, consumption includes stock changes. 3. Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries. 4. Calendar year, selected countries. 5. Data prior to 1989 no longer comparable.

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

U.S. Agricultural Trade

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

	Annual			2000	2001					
	1998	1999	2000	Jun	Jan	Feb	Mar	Apr	May	Jun
Export commodities										
Wheat, f.o.b. vessel, Gulf ports ($/bu.)	3.44	3.04	3.17	3.15	3.67	3.55	3.59	3.58	3.69	3.50
Corn, f.o.b. vessel, Gulf ports ($/bu.)	2.58	2.29	2.24	2.13	2.40	2.35	2.32	2.22	2.14	2.11
Grain sorghum, f.o.b. vessel, Gulf ports ($/bu.)	2.49	2.14	2.23	2.02	2.55	2.49	2.43	2.38	2.40	2.27
Soybeans, f.o.b. vessel, Gulf ports ($/bu.)	6.37	5.02	5.26	5.37	5.22	4.96	4.81	4.60	4.81	4.97
Soybean oil, Decatur (¢/lb.)	25.78	17.51	15.01	15.65	12.54	12.38	13.91	13.53	13.53	14.21
Soybean meal, Decatur ($/ton)	162.74	141.52	174.69	177.45	183.17	166.08	156.31	158.43	165.14	172.60
Cotton, 7-market avg. spot (¢/lb.)	67.04	52.30	57.47	54.97	56.66	54.10	47.22	42.19	40.02	37.38
Tobacco, avg. price at auction (¢/lb.)	179.77	177.82	182.73	--	205.05	205.97	169.51	142.03	--	--
Rice, f.o.b., mill, Houston ($/cwt)	18.95	16.99	14.84	14.38	15.00	15.00	15.00	15.00	15.00	15.00
Inedible tallow, Chicago (¢/lb.)	17.67	12.99	9.92	10.00	10.73	8.59	8.90	9.00	9.50	10.00
Import commodities										
Coffee, N.Y. spot ($/lb.)	1.39	1.05	0.92	0.90	0.65	0.68	0.68	0.71	0.76	0.54
Rubber, N.Y. spot (¢/lb.)	40.57	36.66	37.72	37.07	35.98	34.78	34.78	34.50	34.80	35.00
Cocoa beans, N.Y. ($/lb.)	0.72	0.47	0.36	0.38	0.42	0.48	0.48	0.46	0.47	0.42

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

Table 25—Trade Balance

	Fiscal Year			2000		2001				
	1999	2000	2001 P	May	Dec	Jan	Feb	Mar	Apr	May
					$ million					
Exports										
Agricultural	49,148	50,911	53,500	4,020	4,613	4,373	4,536	4,871	4,285	4,143
Nonagricultural	586,606	647,384	--	54,237	55,898	52,345	53,115	59,467	52,529	54,773
Total[1]	635,754	698,295	--	58,257	60,511	56,718	57,651	64,338	56,814	58,916
Imports										
Agricultural	37,310	38,923	39,000	3,503	3,207	3,407	3,063	3,453	3,417	3,346
Nonagricultural	938,948	1,132,257	--	96,443	95,193	97,096	87,820	99,049	92,292	92,832
Total [2]	976,258	1,171,180	--	99,946	98,400	100,503	90,883	102,502	95,709	96,178
Trade balance										
Agricultural	11,838	11,988	14,500	517	1,406	966	1,473	1,418	868	797
Nonagricultural	-352,342	-484,873	--	-42,206	-39,295	-44,751	-34,705	-39,582	-39,763	-38,059
Total	-340,504	-472,885	--	-41,689	-37,889	-43,785	-33,232	-38,164	-38,895	-37,262

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

Table 26—Indexes of Real Trade-Weighted Dollar Exchange Rates[1]

	Annual			2000			2001			
	1998	1999	2000	Apr	Nov	Dec	Jan	Feb	Mar	Apr
					1995 = 100					
Total U.S. Trade	114.0	114.2	119.0	117.3	123.4	121.7	122.0	123.6	126.5	126.0
U.S. markets										
All agricultural trade	119.2	117.5	120.2	120.6	126.8	126.5	126.8	128.2	131.6	131.6
Bulk commodities	118.3	116.6	121.2	119.3	126.1	126.2	126.4	127.7	130.9	131.4
Corn	122.1	116.3	119.2	115.9	121.8	123.4	124.1	124.7	128.7	128.6
Cotton	113.6	112.4	118.3	115.4	121.9	122.3	122.5	124.1	127.0	128.6
Rice	111.5	112.5	117.8	116.4	121.4	119.7	120.1	123.4	125.9	126.0
Soybeans	121.8	119.4	127.3	124.0	132.4	131.1	129.7	131.0	133.7	134.6
Tobacco, raw	108.1	112.8	134.3	131.4	141.5	138.7	137.6	141.3	145.6	146.8
Wheat	125.6	124.6	120.2	116.4	123.0	122.9	124.4	124.7	126.9	127.6
High-value products	119.9	118.3	119.4	121.6	127.3	126.7	127.1	128.6	132.3	131.7
Processed intermediates	115.9	115.1	120.2	118.9	125.6	124.3	124.1	125.8	128.9	128.8
Soymeal	106.6	107.2	117.0	111.6	117.0	115.3	115.8	116.9	118.9	118.7
Soyoil	89.1	98.1	105.2	105.1	108.0	107.0	107.6	108.8	109.7	109.9
Produce and horticulture	118.4	117.3	122.0	120.7	127.5	125.8	126.0	127.7	131.3	130.8
Fruits	120.4	116.8	119.2	117.9	123.7	123.5	124.3	125.7	129.7	129.1
Vegetables	115.9	113.6	114.4	114.3	118.4	116.9	118.0	119.8	124.1	121.9
High-value processed	123.9	121.4	117.8	124.2	128.8	129.0	130.0	131.3	135.5	134.5
Fruit juices	122.9	120.1	123.4	122.7	129.6	128.4	128.8	130.3	134.9	134.0
Poultry	139.2	155.0	116.9	177.3	173.0	172.3	173.0	174.2	175.0	173.6
Red meats	135.4	124.0	121.7	121.8	128.1	130.7	132.3	133.5	140.8	139.7
U.S. competitors										
All agricultural trade	115.7	122.1	135.5	132.9	144.0	138.9	137.0	139.2	141.3	142.6
Bulk commodities	122.2	130.4	134.0	139.9	148.8	145.1	144.7	146.8	149.1	150.4
Corn	113.1	120.5	134.0	131.3	141.0	136.7	135.2	136.6	137.9	138.9
Cotton	128.1	130.7	133.4	140.5	148.5	143.8	142.3	143.7	145.4	147.2
Rice	118.9	120.5	131.1	126.6	139.8	136.4	136.5	138.1	141.3	142.9
Soybeans	106.4	132.1	134.6	133.5	140.2	139.5	139.2	144.6	144.7	147.4
Tobacco, raw	115.3	127.3	121.8	120.5	125.4	121.6	120.0	125.1	125.0	126.0
Wheat	115.6	118.5	129.8	128.0	138.3	132.6	132.1	134.9	138.5	137.4
High-value products	118.4	125.2	139.1	137.9	149.4	143.9	141.3	143.6	145.7	147.2
Processed intermediates	119.9	127.1	138.2	138.0	148.6	144.0	142.3	144.8	147.1	148.6
Soymeal	107.8	132.0	136.9	134.1	143.0	141.7	140.6	145.5	145.6	148.9
Soyoil	107.1	123.3	130.0	127.2	135.9	133.3	133.4	136.8	137.4	139.2
Produce and horticulture	114.2	120.0	133.3	131.3	140.8	136.3	133.6	135.2	136.6	138.0
Fruits	121.0	123.5	135.9	131.5	143.0	138.6	137.9	139.5	142.4	144.0
Vegetables	102.4	109.2	121.7	119.4	127.6	123.7	121.8	123.3	124.4	125.4
High-value processed	118.7	125.7	141.3	139.7	152.5	146.1	142.9	145.4	147.7	149.2
Fruit juices	116.6	122.1	137.0	133.9	144.4	139.3	137.2	139.4	141.9	143.0
Poultry	109.5	121.6	134.9	131.8	143.1	138.2	136.6	139.4	141.1	143.1
Red meats	116.3	122.3	137.8	134.1	147.5	141.0	139.1	142.1	145.2	145.6
U.S. suppliers										
All agricultural trade	111.4	113.5	120.0	117.7	124.1	121.7	121.3	123.3	125.3	125.6
High-value products	108.8	111.6	118.2	116.4	122.6	119.9	119.4	121.0	122.9	122.6
Processed intermediates	112.3	114.8	121.4	119.9	127.1	124.0	123.7	125.5	128.0	127.7
Grains and feeds	112.5	113.0	117.9	116.5	122.7	119.5	119.7	121.7	125.0	123.6
Vegetable oils	123.1	120.9	130.1	127.1	136.8	133.9	132.7	134.5	137.2	138.7
Produce and horticulture	98.4	101.1	103.7	102.2	103.6	103.4	103.2	103.7	103.8	103.3
Fruits	96.5	97.2	98.0	96.0	97.6	99.5	99.4	100.2	101.4	100.7
Vegetables	88.7	84.1	81.3	81.2	80.8	80.6	81.1	81.7	81.1	79.2
High-value processed	111.8	114.9	123.7	121.4	129.7	125.8	125.0	127.1	129.7	129.4
Cocoa and products	120.3	126.1	137.6	135.6	142.7	138.8	137.6	139.5	142.3	143.8
Coffee and products	101.6	111.6	116.4	113.0	117.2	116.2	116.3	117.4	117.6	118.5
Dairy products	117.2	122.5	137.9	136.1	150.0	142.2	140.0	142.4	145.7	146.2
Fruit juices	109.2	122.3	127.8	125.5	132.6	131.3	130.6	134.1	135.4	137.1
Meats	102.1	105.6	115.4	120.0	128.6	123.8	124.0	126.4	130.0	128.4

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

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

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

Table 27—U.S. Agricultural Exports & Imports

	Fiscal Year			May		Fiscal Year			May	
	1999	2000	2001 F	2000	2001	1999	2000	2001 F	2000	2001
	1,000 units					*$ million*				
Exports										
Animals, live	--	--	--	--	--	476	608	--	33	29
Meats and preps., excl. poultry (mt)[1]	2,089	2,457	1,800	211	217	4,500	5,454	4,900	471	470
Dairy products	--	--	--	--	--	914	996	1,000	79	108
Poultry meats (mt)	2,402	2,845	3,000	210	261	1,750	1,961	2,100	142	198
Fats, oils, and greases (mt)	1,387	1,206	1,100	105	78	544	421	--	35	23
Hides and skins, incl. furskins	--	--	--	--	--	1,108	1,479	1,900	150	171
Cattle hides, whole (no.)	17,845	21,837	--	2,239	2,053	844	1,166	--	124	142
Mink pelts (no.)	4,172	4,352	--	315	278	98	111	--	6	6
Grains and feeds (mt)[2]	104,576	104,009	--	8,003	6,903	14,272	13,788	14,200	1,104	1,033
Wheat (mt)[3]	28,806	27,779	27,800	2,389	1,864	3,648	3,378	3,800	289	249
Wheat flour (mt)	958	825	700	24	42	177	132	--	5	9
Rice (mt)	3,076	3,299	3,000	174	191	1,010	903	700	46	45
Feed grains, incl. products (mt)[4]	58,398	57,195	53,800	4,214	3,587	5,821	5,483	5,200	446	354
Feeds and fodders (mt)	11,800	13,386	13,700	1,074	1,095	2,252	2,496	2,800	205	252
Other grain products (mt)	1,538	1,525	--	128	124	1,363	1,397	--	113	124
Fruits, nuts, and preps. (mt)	3,439	3,736	--	298	296	3,805	3,871	4,900	322	331
Fruit juices, incl. froz. (1,000 hectoliters)	12,317	11,902	--	1,239	1,044	735	716	--	68	65
Vegetables and preps.	--	--	--	--	--	4,245	4,443	3,100	384	408
Tobacco, unmanufactured (mt)	205	180	200	16	14	1,376	1,229	1,100	114	105
Cotton, excl. linters (mt)[5]	884	1,474	1,500	143	151	1,309	1,809	2,000	184	185
Seeds (mt)	579	730	--	50	55	800	787	800	37	42
Sugar, cane or beet (mt)	158	115	--	7	10	56	40	--	3	4
Oilseeds and products (mt)	33,597	36,055	36,800	1,831	1,843	8,638	8,386	8,800	480	495
Oilseeds (mt)	--	--	--	--	--	--	--	--	--	--
Soybeans (mt)	22,974	26,038	26,800	1,240	1,082	4,748	5,070	5,100	261	202
Protein meal (mt)	6,726	6,870	--	396	540	1,101	1,259	--	74	97
Vegetable oils (mt)	2,669	2,130	--	131	163	1,846	1,346	--	95	101
Essential oils (mt)	47	53	--	4	5	507	593	--	49	61
Other	--	--	--	--	--	4,112	4,330	--	365	415
Total	--	--	--	--	--	49,148	50,911	53,500	4,020	4,143
Imports										
Animals, live	--	--	--	--	--	1,411	1,737	2,100	144	167
Meats and preps., excl. poultry (mt)	1,403	1,555	1,600	139	130	3,108	3,724	4,100	338	338
Beef and veal (mt)	943	1,027	--	93	89	2,047	2,405	--	221	227
Pork (mt)	337	402	--	35	29	721	958	--	86	77
Dairy products	--	--	--	--	--	1,572	1,635	1,600	132	150
Poultry and products	--	--	--	--	--	201	288	--	29	29
Fats, oils, and greases (mt)	85	107	--	11	9	56	71	--	7	6
Hides and skins, incl. furskins (mt)	--	--	--	--	--	146	160	--	14	15
Wool, unmanufactured (mt)	29	25	--	3	2	75	66	--	7	4
Grains and feeds	--	--	--	--	--	2,943	3,058	3,200	240	250
Fruits, nuts, and preps., excl. juices (mt)[6]	8,171	8,366	8,200	800	774	4,619	4,546	5,200	450	388
Bananas and plantains (mt)	4,418	4,396	4,100	399	362	1,212	1,128	1,200	112	108
Fruit juices (1,000 hectoliters)	31,655	32,199	27,100	2,524	2,583	772	783	--	69	57
Vegetables and preps.	--	--	--	--	--	4,527	4,657	5,100	406	443
Tobacco, unmanufactured (mt)	217	220	200	20	21	742	651	700	56	64
Cotton, unmanufactured (mt)	144	34	--	4	3	150	28	--	4	2
Seeds (mt)	357	448	--	20	33	457	493	--	36	34
Nursery stock and cut flowers	--	--	--	--	--	1,076	1,165	1,200	132	137
Sugar, cane or beet (mt)	1,692	1,379	--	130	94	606	493	--	48	35
Oilseeds and products (mt)	3,767	4,069	4,100	409	334	1,899	1,873	1,800	188	131
Oilseeds (mt)	1,000	1,103	--	127	109	326	310	--	35	25
Protein meal (mt)	1,131	1,194	--	103	82	147	150	--	14	11
Vegetable oils (mt)	1,637	1,772	--	180	142	1,427	1,413	--	139	96
Beverages, excl. fruit juices (1,000 hectoliters)	--	--	--	--	--	4,258	4,702	--	428	463
Coffee, tea, cocoa, spices (mt)	2,520	2,841	--	241	214	5,306	5,218	--	445	346
Coffee, incl. products (mt)	1,294	1,411	1,200	131	109	2,967	2,905	1,800	269	156
Cocoa beans and products (mt)	865	1,046	900	70	68	1,531	1,466	1,400	101	108
Rubber and allied gums (mt)	1,148	1,249	1,100	117	82	739	841	800	87	53
Other	--	--	--	--	--	2,646	2,735	--	242	235
Total	--	--	--	--	--	37,310	38,923	39,000	3,503	3,346

F = Forecast. -- = Not available. Projections are fiscal years (Oct.1 through Sept. 30) and are from Outlook for U.S. Agricultural Exports.
1999 and 2000 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				
	1999	2000	2001 F	May	Dec	Jan	Feb	Mar	Apr	May
					$ million					
Region & country										
Western Europe	7,528	6,712	6,600	438	704	626	718	574	546	460
European Union[1]	6,958	6,373	6,200	413	687	605	665	528	470	397
Belgium-Luxembourg	602	538	--	41	78	65	46	63	52	40
France	377	347	--	23	53	26	49	29	24	20
Germany	1,057	947	--	56	73	91	97	73	76	72
Italy	574	560	--	37	56	37	68	42	46	27
Netherlands	1,587	1,459	--	78	184	163	162	113	98	75
United Kingdom	1,122	1,033	--	87	72	84	80	87	84	84
Portugal	131	145	--	11	22	22	18	8	7	11
Spain, incl. Canary Islands	784	664	--	28	83	55	82	49	24	26
Other Western Europe	570	340	400	25	17	21	53	46	76	63
Switzerland	455	250	--	16	12	15	47	41	67	54
Eastern Europe	190	167	200	12	13	16	21	24	23	13
Poland	73	47	--	3	4	6	8	12	13	5
Former Yugoslavia	47	67	--	5	2	4	6	5	1	1
Romania	18	12	--	1	5	1	3	1	3	3
Newly Independent States	881	937	800	71	61	85	61	47	82	113
Russia	532	674	600	59	43	67	45	40	69	90
Asia[2]	20,441	22,051	20,800	1,833	1,970	1,905	1,967	2,297	1,790	1,735
West Asia (Mideast)	1,978	2,363	2,300	171	194	156	187	177	156	140
Turkey	448	701	600	48	68	34	30	55	49	39
Iraq	9	8	--	--	--	--	3	2	2	--
Israel, incl. Gaza and W. Bank	417	458	--	45	51	43	36	40	38	28
Saudi Arabia	468	482	500	35	41	40	40	33	12	37
South Asia	499	416	400	36	53	28	32	25	36	62
Bangladesh	165	82	--	6	16	6	13	7	7	12
India	189	186	--	11	20	18	9	13	17	32
Pakistan	89	93	--	9	6	2	2	5	5	11
China	1,011	1,474	2,300	80	167	177	252	396	119	73
Japan	8,933	9,353	9,100	878	775	840	737	843	771	812
Southeast Asia	2,218	2,602	3,100	169	195	274	291	296	212	227
Indonesia	499	681	900	28	50	92	89	89	54	86
Philippines	735	866	1,000	73	68	85	72	79	62	54
Other East Asia	5,803	5,844	5,900	499	585	430	468	559	496	422
Korea, Rep.	2,482	2,569	2,600	216	276	205	209	247	208	180
Hong Kong	1,264	1,255	1,300	96	123	84	95	115	100	91
Taiwan	2,047	2,011	2,000	188	186	141	163	197	189	151
Africa	2,160	2,272	2,500	126	213	166	208	167	142	89
North Africa	1,468	1,565	1,700	82	149	123	161	112	95	49
Morocco	162	141	--	11	24	7	6	8	6	2
Algeria	223	255	--	22	16	27	31	13	16	11
Egypt	1,002	1,094	1,100	40	80	74	112	82	69	34
Sub-Sahara	693	707	800	44	65	43	47	55	48	40
Nigeria	176	160	--	12	14	14	12	20	15	16
S. Africa	165	164	--	11	7	9	7	10	7	8
Latin America and Caribbean	10,495	10,639	11,500	835	985	889	919	1,037	987	961
Brazil	366	253	200	21	19	17	11	16	20	17
Caribbean Islands	1,453	1,457	--	108	114	105	110	124	125	111
Central America	1,209	1,129	--	86	96	84	93	106	113	92
Colombia	468	427	--	38	30	31	32	36	51	33
Mexico	5,672	6,329	7,400	517	648	574	599	681	587	618
Peru	347	201	--	5	5	9	16	11	19	19
Venezuela	458	404	400	32	30	30	24	23	33	38
Canada	6,951	7,520	8,000	654	607	656	599	680	669	723
Oceania	502	490	500	31	41	31	43	42	38	39
Total	49,148	50,911	53,500	4,020	4,613	4,373	4,536	4,871	4,285	4,143

F = Forecast. -- = Not available. Based on fiscal year beginning October 1 and ending September 30. 1. Austria, Finland, and Sweden are included in the European Union. 2. Asia forecasts exclude West Asia (Mideast). NOTE: Adjusted for transhipments through Canada for 1998 and 1999 through December 1999, but transhipments are not distributed by country as previously for 2000. *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	2000P	2001F
						$ billion					
	Final crop output	88.9	82.4	100.3	95.7	115.6	112.3	102.1	93.1	95.5	96.2
	Food grains	8.5	8.2	9.5	10.4	10.8	10.4	8.9	7.3	6.6	6.6
	Feed crops	20.1	20.2	20.3	24.5	27.2	27.0	22.7	19.8	20.0	20.8
	Cotton	5.2	5.2	6.7	6.9	7.0	6.3	6.1	4.7	4.6	4.4
	Oil crops	13.3	13.2	14.7	15.5	16.4	19.8	17.5	13.6	13.9	13.8
	Tobacco	3.0	2.9	2.7	2.5	2.8	2.9	2.8	2.3	1.8	1.8
	Fruits and tree nuts	10.1	10.3	10.3	11.1	11.9	13.1	12.2	13.0	13.4	13.5
	Vegetables	11.8	13.7	14.0	15.0	14.4	14.7	15.1	15.2	16.2	15.9
	All other crops	13.7	13.7	14.7	15.0	15.8	16.9	17.1	17.4	18.3	18.6
	Home consumption	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	Value of inventory adjustment[1]	3.2	-5.3	7.2	-5.3	9.1	1.1	-0.5	-0.2	0.7	0.6
	Final animal output	87.1	92.0	89.7	87.7	92.0	96.5	94.2	95.1	99.6	106.9
	Meat animals	47.7	51.0	46.7	44.9	44.2	49.7	43.3	45.6	53.0	54.0
	Dairy products	19.7	19.3	20.0	19.9	22.8	20.9	24.1	23.2	20.6	24.9
	Poultry and eggs	15.5	17.4	18.5	19.1	22.5	22.3	22.9	22.9	21.8	23.2
	Miscellaneous livestock	2.6	2.9	3.1	3.3	3.4	3.6	3.7	3.7	4.4	4.4
	Home consumption	0.5	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4
	Value of inventory adjustment[1]	1.0	1.1	1.1	0.2	-1.1	-0.4	-0.3	-0.7	-0.6	0.0
	Services and forestry	15.2	17.0	18.1	19.9	20.8	22.1	24.7	26.7	27.8	27.8
	Machine hire and customwork	1.8	1.9	2.1	1.9	2.2	2.4	2.2	2.0	2.1	2.3
	Forest products sold	2.2	2.5	2.6	2.8	2.6	2.8	3.0	2.9	2.7	2.7
	Other farm income	4.1	4.6	4.3	5.8	6.2	6.9	8.7	10.8	12.0	11.7
	Gross imputed rental value of farm dwellings	7.2	8.1	9.0	9.4	9.9	10.1	10.8	10.9	10.9	11.0
	Final agricultural sector output[2]	191.3	191.3	208.0	203.4	228.4	230.9	221.0	214.9	223.0	230.9
Minus	Intermediate consumption outlays:	93.4	100.7	104.9	109.7	113.2	121.0	118.5	120.8	127.3	130.4
	Farm origin	38.6	41.3	41.3	41.8	42.7	46.8	44.8	45.5	47.9	46.5
	Feed purchased	20.1	21.4	22.6	23.8	25.2	26.3	25.0	24.5	25.1	24.7
	Livestock and poultry purchased	13.6	14.7	13.3	12.5	11.3	13.8	12.5	13.8	15.5	14.4
	Seed purchased	4.9	5.2	5.4	5.5	6.2	6.7	7.2	7.2	7.3	7.4
	Manufactured inputs	22.7	23.1	24.4	26.1	28.6	29.2	28.2	27.3	30.3	33.1
	Fertilizers and lime	8.3	8.4	9.2	10.0	10.9	10.9	10.6	9.9	10.4	12.2
	Pesticides	6.5	6.7	7.2	7.7	8.5	9.0	9.0	8.6	8.5	8.8
	Petroleum fuel and oils	5.3	5.4	5.3	5.4	6.0	6.2	5.6	5.8	8.3	8.8
	Electricity	2.6	2.7	2.7	3.0	3.2	3.0	2.9	3.0	3.1	3.3
	Other intermediate expenses	32.1	36.2	39.2	41.7	41.9	44.9	45.6	48.0	49.1	50.8
	Repair and maintenance of capital items	8.5	9.2	9.1	9.5	10.3	10.4	10.4	10.5	10.6	10.9
	Machine hire and customwork	3.8	4.4	4.8	4.8	4.7	4.9	5.4	5.3	5.5	5.6
	Marketing, storage, and transportation	4.5	5.6	6.8	7.2	6.9	7.1	6.9	7.3	7.5	8.0
	Contract labor	1.7	1.8	1.8	2.0	2.1	2.6	2.4	2.6	2.7	2.8
	Miscellaneous expenses	13.6	15.2	16.7	18.3	17.8	19.9	20.6	22.3	22.8	23.5
Plus	Net government transactions:	2.7	6.9	1.1	0.2	0.2	0.2	4.8	13.1	15.2	7.7
	+ Direct government payments	9.2	13.4	7.9	7.3	7.3	7.5	12.2	20.6	22.9	15.7
	- Motor vehicle registration and licensing fees	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.5	0.5
	- Property taxes	6.1	6.2	6.4	6.6	6.7	6.8	6.9	7.1	7.2	7.5
	Gross value added	100.5	97.5	104.3	93.9	115.4	110.1	107.3	107.2	110.9	108.2
Minus	Capital consumption	18.3	18.3	18.7	19.2	19.4	19.6	19.7	19.9	19.8	20.1
	Net value added[2]	82.2	79.2	85.6	74.7	96.0	90.6	87.5	87.3	91.1	88.1
Minus	Factor payments:	34.6	34.8	36.8	37.8	41.1	42.0	42.9	43.9	45.9	45.7
	Employee compensation (total hired labor)	12.3	13.2	13.5	14.3	15.2	16.0	16.9	17.5	18.0	18.9
	Net rent received by nonoperator landlords	11.2	10.9	11.8	10.9	12.9	12.8	12.7	12.9	13.7	12.6
	Real estate and non-real estate interest	11.0	10.7	11.6	12.6	13.0	13.1	13.4	13.6	14.2	14.2
	Net farm income[2]	47.7	44.3	48.8	36.9	54.9	48.6	44.6	43.4	45.2	42.4

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

Table 30—Farm Income Statistics

	1992	1993	1994	1995	1996	1997	1998	1999	2000P	2001F
						$ billion				
Cash income statement										
1. Cash receipts	171.3	177.9	181.1	188.0	199.1	207.6	196.6	188.6	194.4	202.0
Crops[1]	85.6	87.5	92.9	100.8	106.3	111.1	102.5	93.1	94.6	95.5
Livestock	85.7	90.4	88.2	87.1	92.8	96.5	94.1	95.5	99.8	106.5
2. Direct Government payments	9.2	13.4	7.9	7.3	7.3	7.5	12.2	20.6	22.9	15.7
3. Farm-related income[2]	8.0	9.0	9.0	10.5	10.9	12.0	13.9	15.8	16.9	16.7
4. Gross cash income (1+2+3)	188.5	200.3	198.1	205.8	217.4	227.1	222.6	225.0	234.2	234.4
5. Cash expenses[3]	133.5	141.2	147.4	153.2	159.8	168.6	167.2	170.4	178.9	182.1
6. Net cash income (4-5)	54.9	59.1	50.7	52.5	57.6	58.5	55.4	54.6	55.4	52.4
Farm income statement										
7. Gross cash income (4)	188.5	200.3	198.1	205.8	217.4	227.1	222.6	225.0	234.2	234.4
8. Noncash income[4]	7.8	8.7	9.6	9.9	10.3	10.6	11.3	11.4	11.5	11.6
9. Value of inventory adjustment	4.2	-4.2	8.3	-5.0	8.0	0.7	-0.7	-0.9	0.2	0.6
10. Gross farm income (7+8+9)	200.4	204.7	215.9	210.7	235.7	238.4	233.2	235.5	245.9	246.6
11. Total production expenses	152.8	160.4	167.1	173.8	180.8	189.8	188.6	192.1	200.6	204.2
12. Net farm income (10-11)	47.7	44.3	48.8	36.9	54.9	48.6	44.6	43.4	45.2	42.4

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

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

Table 31—Average Income to Farm Operator Households[1]

	1993	1994	1995	1996	1997	1998	1999	2000P	2001F
					$ per farm				
Net cash farm business income[2]	11,248	11,389	11,218	13,502	12,676	14,357	13,194	12,981	11,177
Less depreciation[3]	6,219	6,466	6,795	6,906	6,578	7,409	7,027	--	--
Less wages paid to operator[4]	454	425	522	531	513	637	499	--	--
Less farmland rental income[5]	534	701	769	672	568	543	802	--	--
Less adjusted farm business income due to other household(s)[6]	872	815	649	1,094	*1,505	1,332	1,262	--	--
					$ per farm operator household				
Equals adjusted farm business income	3,168	2,981	2,484	4,300	3,513	4,436	3,603	--	--
Plus wages paid to operator	454	425	522	531	513	637	499	--	--
Plus net income from farmland rental[7]	--	--	1,053	1,178	945	868	1,312	--	--
Equals farm self-employment income	3,623	3,407	4,059	6,009	4,971	5,941	5,415	--	--
Plus other farm-related earnings[8]	1,192	970	661	1,898	1,234	1,165	944	--	--
Equals earnings of the operator household from farming activities	4,815	4,376	4,720	7,906	6,205	7,106	6,359	4,640	2,839
Plus earnings of the operator household from off-farm sources[9]	35,408	38,092	39,671	42,455	46,358	52,628	57,988	60,058	62,178
Equals average farm operator household income	40,223	42,469	44,392	50,361	52,562	59,734	64,347	64,698	65,017
					$ per U.S. household				
U.S. average household income[10]	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	--	--

-- = Not available. Values in last two columns are preliminary or forecast. 1.This table derives farm operator household income estimates from the Agricultural Resource Management Study (ARMS) that are consistent with Current Population Survey (CPS) methodology. The CPS, conducted by the Bureau of the Census, is the source of official U.S. household income statistics. The CPS defines income to include any income received as cash. The CPS definition departs from a strictly cash concept by including depreciation as an expense that farm operators and other self-employed people subtract from gross receipts when reporting net cash income. 2. A component of farm-sector income. Excludes income of contractors and landlords as well as the income of farms organized as nonfamily corporations or cooperatives, and farms run by a hired manager. Includes income of farms organized as proprietorships, partnerships, and family corporations. 3. Consistent with the CPS definition of self-employed income, reported depreciation expenses are subtracted from net cash farm income. The ARMS collects data on farm business depreciation used for tax purposes. 4. Wages paid to the operator are excluded because they are not shared among other households that have claims on farm business income. These wages are added to the operator household's adjusted farm business income to obtain farm self-employment income. 5. Gross rental income is excluded because net rental income from farm operation is added below to income received by the household. 6. More than one household may have a claim on the income of a farm business. On average, 1.1 households share the income of a farm business. 7. Includes net rental income from the farm business. Also includes net rental income from farmland held by household members that is not part of the farm business. In 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.

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

	1992	1993	1994	1995	1996	1997	1998	1999	2000P	2001F
					$ billion					
Farm assets	868.3	910.2	936.1	967.6	1,004.8	1,053.1	1,085.5	1,116.6	1,124.8	1,139.3
Real estate	640.8	677.6	704.1	740.5	769.5	808.2	841.8	870.0	874.4	883.1
Livestock and poultry[1]	71.0	72.8	67.9	57.8	60.3	67.1	63.4	70.6	73.5	77.7
Machinery and motor vehicles	85.4	86.4	88.1	89.4	89.8	90.1	90.2	89.0	89.3	89.9
Crops stored[2,3]	24.2	23.3	23.3	27.4	31.7	32.9	30.1	26.9	28.1	28.0
Purchased inputs	3.9	3.8	5.0	3.4	4.4	5.1	5.3	4.2	4.5	4.6
Financial assets	43.1	46.3	47.6	49.1	49.0	49.7	54.8	55.8	55.0	56.0
Total farm debt	139.1	142.0	146.8	150.8	156.1	165.4	172.9	176.4	183.6	185.2
Real estate debt[3]	75.4	76.0	77.7	79.3	81.7	85.4	89.6	94.2	97.6	98.9
Non-real estate debt[4]	63.6	65.9	69.1	71.5	74.4	80.1	83.2	82.2	86.0	86.3
Total farm equity	729.3	768.2	789.3	816.8	848.7	887.7	912.7	940.2	941.2	954.1
Selected ratios										
Debt to equity	19.1	18.5	18.6	18.5	18.4	18.6	18.9	18.8	19.5	19.4
Debt to assets	16.0	15.6	15.7	15.6	15.5	15.7	15.9	15.8	16.3	16.3

Values in the last two columns are preliminary or forecast. 1. As of December 31. 2. Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3. Includes CCC storage and drying facilities loans, but excludes debt on operator dwellings. 4. Excludes debt for nonfarm purposes. *Information contact: Ken Erickson (202) 694-5565 or erickson@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 33—Cash Receipts from Farming

	Annual			2000			2001			
	1998	1999	2000	Apr	Nov	Dec	Jan	Feb	Mar	Apr
					$ million					
Commodity cash receipts[1]	196,575	188,610	194,433	13,830	18,039	17,144	18,351	12,908	14,545	14,273
Livestock and products	94,112	95,463	99,797	7,931	8,283	8,200	8,620	7,321	8,185	8,102
Meat animals	43,336	45,600	52,994	4,064	4,115	4,425	4,724	3,779	4,156	4,113
Dairy products	24,114	23,204	20,622	1,803	1,600	1,700	1,816	1,683	1,976	1,970
Poultry and eggs	22,942	22,942	21,789	1,801	1,941	1,802	1,794	1,631	1,808	1,795
Other	3,719	3,717	4,392	263	628	273	285	227	245	224
Crops	102,463	93,146	94,636	5,899	9,756	8,944	9,731	5,587	6,360	6,171
Food grains	8,892	7,292	6,641	259	332	506	681	407	372	294
Feed crops	22,666	19,752	19,951	959	1,801	1,979	3,408	1,402	1,497	1,018
Cotton (lint and seed)	6,101	4,696	4,560	29	786	1,060	772	387	134	83
Tobacco	2,803	2,273	1,766	9	193	200	239	92	19	1
Oil-bearing crops	17,483	13,555	13,869	613	1,142	989	1,946	724	841	547
Vegetables and melons	15,145	15,164	16,201	1,213	1,103	873	849	800	1,138	1,377
Fruits and tree nuts	12,238	12,975	13,366	709	1,968	1,449	755	719	821	870
Other	17,136	17,441	18,282	2,108	2,431	1,888	1,083	1,056	1,538	1,982
Government payments	12,209	20,594	22,896	1,134	2,156	1,997	1,711	1,192	453	3,356
Total	208,784	209,204	217,329	14,963	20,195	19,141	20,061	14,100	14,998	17,629

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

Table 34—Cash Receipts from Farm Marketings, by State

Region and State	Livestock and products				Crops[1]				Total[1]			
	1999	2000P	Mar 2001	Apr 2001	1999	2000P	Mar 2001	Apr 2001	1999	2000P	Mar 2001	Apr 2001
	$ million											
North Atlantic												
Maine	286	262	24	23	229	244	21	25	515	506	46	48
New Hampshire	63	60	5	5	90	96	9	10	153	156	14	15
Vermont	473	441	38	38	68	66	7	11	541	507	46	49
Massachusetts	101	91	9	9	295	307	12	13	396	398	21	22
Rhode Island	8	8	1	1	39	41	3	5	48	48	4	5
Connecticut	180	165	15	14	302	332	21	26	482	498	36	41
New York	2,043	1,934	172	172	1,054	1,201	81	77	3,097	3,136	253	249
New Jersey	187	193	12	11	554	617	35	50	740	810	47	61
Pennsylvania	2,877	2,781	258	280	1,193	1,254	109	104	4,070	4,035	367	384
North Central												
Ohio	1,786	1,751	148	149	2,643	2,639	195	175	4,429	4,390	343	324
Indiana	1,581	1,695	147	152	2,792	2,892	220	94	4,373	4,586	366	246
Illinois	1,524	1,710	148	150	5,233	5,314	433	398	6,757	7,023	580	548
Michigan	1,331	1,704	114	113	2,139	2,153	136	164	3,470	3,857	251	277
Wisconsin	4,149	3,804	342	348	1,447	1,461	93	62	5,596	5,266	435	410
Minnesota	3,548	3,875	344	331	3,513	3,647	196	155	7,061	7,522	540	486
Iowa	4,712	5,747	483	488	5,004	5,039	412	255	9,716	10,786	895	743
Missouri	2,477	2,677	210	233	1,779	1,890	130	79	4,256	4,566	340	312
North Dakota	647	639	63	52	2,112	2,051	128	93	2,759	2,690	190	145
South Dakota	1,830	2,035	148	157	1,709	1,757	107	109	3,539	3,792	255	267
Nebraska	5,425	5,923	441	438	3,130	3,034	230	117	8,555	8,956	671	555
Kansas	5,009	5,488	444	434	2,607	2,550	127	66	7,616	8,038	571	500
Southern												
Delaware	566	557	48	47	153	182	7	9	718	740	55	56
Maryland	937	848	81	78	544	625	53	52	1,481	1,473	133	130
Virginia	1,580	1,549	130	131	704	739	35	38	2,283	2,288	165	169
West Virginia	334	339	28	29	53	53	3	2	387	392	31	32
North Carolina	3,850	4,274	371	342	2,838	2,883	148	185	6,688	7,157	519	526
South Carolina	773	789	60	62	633	710	34	40	1,406	1,499	94	102
Georgia	3,334	3,105	271	269	1,907	1,906	83	102	5,241	5,011	353	371
Florida	1,363	1,337	103	98	5,702	5,724	750	860	7,066	7,060	854	958
Kentucky	2,158	2,335	132	121	1,298	1,028	52	29	3,456	3,363	185	150
Tennessee	1,011	990	84	74	963	994	48	45	1,974	1,984	132	118
Alabama	2,777	2,684	243	211	662	622	33	43	3,438	3,306	275	254
Mississippi	2,143	2,037	184	170	1,031	885	43	37	3,174	2,921	227	208
Arkansas	3,397	3,248	278	277	1,863	1,641	45	39	5,259	4,889	323	316
Louisiana	620	653	59	56	1,228	1,165	37	28	1,848	1,818	96	85
Oklahoma	3,135	3,441	252	287	855	781	43	45	3,991	4,222	295	332
Texas	8,480	9,162	753	727	4,572	4,184	243	281	13,052	13,346	996	1,008
Western												
Montana	928	1,102	55	85	789	703	59	38	1,716	1,805	114	123
Idaho	1,603	1,628	123	131	1,744	1,952	115	179	3,347	3,580	238	310
Wyoming	680	795	44	45	172	160	7	4	852	954	51	49
Colorado	3,016	3,332	250	221	1,338	1,284	89	81	4,354	4,616	339	302
New Mexico	1,441	1,613	126	119	513	470	15	17	1,953	2,083	141	135
Arizona	987	1,063	79	79	1,191	1,219	208	74	2,178	2,283	288	153
Utah	724	770	57	53	243	241	19	26	967	1,011	76	78
Nevada	216	237	19	19	118	150	10	10	334	387	29	28
Washington	1,658	1,710	138	135	3,275	3,387	202	229	4,933	5,098	340	364
Oregon	790	826	66	54	2,262	2,229	135	143	3,052	3,055	202	198
California	6,714	6,269	576	577	18,087	19,669	1,100	1,412	24,801	25,938	1,676	1,989
Alaska	29	32	2	2	19	20	1	1	48	52	4	3
Hawaii	86	87	8	7	447	445	37	34	533	531	44	41
U.S.	95,567	99,797	8,185	8,102	93,134	94,636	6,360	6,171	188,701	194,433	14,545	14,273

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

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

Table 35—CCC Net Outlays by Commodity & Function

	Fiscal year									
	1993	1994	1995	1996	1997	1998	1999	2000	2001 [4]	2002 [4]
	$ million									
Commodity/Program										
Feed grains:										
Corn	5,143	625	2,090	2,021	2,587	2,873	5,402	10,135	4,386	3,013
Grain sorghum	410	130	153	261	284	296	502	979	274	293
Barley	186	202	129	114	109	168	224	397	156	112
Oats	16	5	19	8	8	17	41	61	61	27
Corn and oat products	10	10	1	0	0	0	0	5	3	1
Total feed grains	5,765	972	2,392	2,404	2,988	3,354	6,169	11,577	4,880	3,446
Wheat and products	2,185	1,729	803	1,491	1,332	2,187	3,435	5,320	2,121	1,120
Rice	887	836	814	499	459	491	911	1,774	920	859
Upland cotton	2,239	1,539	99	685	561	1,132	1,882	3,808	827	709
Tobacco	235	693	-298	-496	-156	376	113	634	148	-97
Dairy	253	158	4	-98	67	291	480	684	1,217	157
Soybeans	109	-183	77	-65	5	139	1,289	2,839	3,324	2,821
Peanuts	-13	37	120	100	6	-11	21	35	62	0
Sugar	-35	-24	-3	-63	-34	-30	-51	465	-37	-29
Honey	22	0	-9	-14	-2	0	2	7	26	-10
Wool and mohair	179	211	108	55	0	0	10	-2	35	-13
Operating expense[1]	6	6	6	6	6	5	4	60	5	5
Interest expenditure	129	-17	-1	140	-111	76	210	736	336	548
Export programs [2]	2,193	1,950	1,361	-422	125	212	165	216	569	596
1988-2000 Disaster/tree/ livestock assistance	944	2,566	660	95	130	3	2,241	1,452	2,544	0
Conservation Reserve Program	0	0	0	2	1,671	1,693	1,462	1,511	1,693	1,788
Other conservation programs	0	0	0	7	105	197	292	263	367	277
Other	949	-137	-103	320	104	28	588	886	1,490	881
Total	16,047	10,336	6,030	4,646	7,256	10,143	19,223	32,265	20,527	13,058
Function										
Price support loans (net)	2,065	527	-119	-951	110	1,128	1,455	3,369	1,315	853
Cash direct payments:[3]										
Production flexibility contract	0	0	0	5,141	6,320	5,672	5,476	5,057	4,072	3,952
Market loss assistance	0	0	0	0	0	0	3,011	11,046	675	0
Deficiency	8,607	4,391	4,008	567	-1,118	-7	-3	1	0	0
Loan deficiency	387	495	29	0	0	478	3,360	6,419	5,611	4,225
Oilseed	0	0	0	0	0	0	0	460	500	0
Cotton user marketing	114	149	88	34	6	416	280	446	214	151
Other	35	22	9	61	1	0	1	460	549	14
Conservation Reserve Program	0	0	0	2	1,671	1,693	1,435	1,476	1,665	1,788
Other conservation programs	0	0	0	0	85	156	247	215	306	233
Noninsured Assistance (NAP)	0	0	0	2	52	23	54	38	177	160
Total direct payments	9,143	5,057	4,134	5,807	7,017	8,431	13,861	25,618	13,769	10,523
1988-00 crop disaster	872	2,461	577	14	2	-2	1,913	1,251	1,995	0
Emergency livestock/tree/DRAP livestock indemn/forage assist.	72	105	83	81	128	5	328	201	549	0
Purchases (net)	525	293	-51	-249	-60	207	668	120	1,079	-42
Producer storage payments	9	12	23	0	0	0	0	0	0	0
Processing, storage, and transportation	136	112	72	51	33	38	62	81	95	81
Export donations ocean transportation	352	156	50	69	34	40	323	370	310	36
Operating expense[1]	6	6	6	6	6	5	4	60	5	5
Interest expenditure	129	-17	-1	140	-111	76	210	736	336	548
Export programs [2]	2,193	1,950	1,361	-422	125	212	165	216	569	596
Other	545	-326	-105	100	-28	3	234	243	505	458
Total	16,047	10,336	6,030	4,646	7,256	10,143	19,223	32,265	20,527	13,058

1. Does not include CCC Transfers to General Sales Manager. 2. Includes Export Guarantee Program, Direct Export Credit Program, CCC Transfers to the General Sales Manager, Market Access (Promotion) Program, starting in FY 1991 and starting in FY 1992 the Export Guarantee Program - Credit Reform, Export Enhancement Program, Dairy Export Incentive Program, and Technical Assistance to Emerging Markets, and starting in FY 2000 Foreign Market Development Cooperative Program and Quality Samples Program. 3. Includes cash payments only. Excludes generic certificates in FY 86-96. 4. Estimated in FY 2002 President's Budget which was released on April 9, 2001 based on October 2000 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

Food Expenditures

Table 36—Food Expenditures

	Annual			2001			Year-to-date cumulative		
	1998	1999	2000	Apr	May	Jun	Apr	May	Jun
				$ billion					
Sales[1]									
At home [2]	390.1	407.6	442.4	35.7	34.7	32.5	139.0	173.7	206.3
Away from home [3]	310.4	332.7	359.9	31.5	34.0	37.4	123.8	157.8	195.2
				1998 $ billion					
Sales[1]									
At home[2]	390.1	400.0	424.4	33.4	32.4	30.2	130.4	162.8	193.1
Away from home[3]	310.4	324.3	341.7	29.5	31.6	34.7	116.0	147.6	182.3
				Percent change from year earlier ($ billion)					
Sales[1]									
At home [2]	3.9	4.5	8.5	1.0	-5.6	-11.2	2.1	0.4	-1.6
Away from home[3]	4.4	7.2	8.2	0.9	5.5	15.7	3.7	4.1	6.2
				Percent change from year earlier (1998 $ billion)					
Sales[1]									
At home[2]	1.6	2.5	6.1	-2.3	-8.5	-14.2	-1.1	-2.7	-4.7
Away from home[3]	1.7	4.5	5.4	-1.5	2.6	12.4	1.2	1.5	3.4

-- = Not available. 1. Food only (excludes alcoholic beverages). Not seasonally adjusted. 2. Excludes donations and home production. 3. Excludes donations, child nutrition subsidies, and meals furnished to employees, patients, and inmates. *Information contact: Annette Clauson (202) 694-5389*
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 Agr. Econ. Rpt. No. 575, Aug. 1987.

Transportation

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

	Annual			2000	2001					
	1998	1999	2000	Jun	Jan	Feb	Mar	Apr	May	Jun
Rail freight rate index[1] (Dec. 1984=100)										
All products	113.4	113.0	114.5	114.4	115.9	115.8	116.0	115.5	115.7	116.1
Farm products	123.9	121.7	123.1	122.3	124.8	124.4	124.6	123.8	123.8	124.0
Grain food products	107.4	99.7	100.4	100.4	101.3	102.2	102.3	101.9	102.6	102.9
Grain shipments										
Rail carloadings (1,000 cars)[2]	22.8	24.2	23.2	20.1	23.0	23.0	23.2	20.6	18.0	20.1
Barge shipments (mil. ton)[3]	3.0	3.5	3.1	3.3	1.0	1.9	2.6	2.5	2.1	4.2
Fresh fruit and vegetable shipments[4]										
Piggy back (mil. cwt)	0.9	0.7	0.8	1.0	0.7	0.6	0.9	0.7	1.1	1.0
Rail (mil. cwt)	1.2	1.1	1.4	2.0	1.8	1.3	1.5	1.1	1.7	2.2
Truck (mil. cwt)	42.2	45.2	45.0	56.5	38.3	36.3	47.3	70.4	58.9	56.6

-- = 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: Gary Vocke (202) 694-5285

Indicators of Farm Productivity

Table 38—Indexes of Farm Production, Input Use, & Productivity[1]

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

-- = Not available. Values for latest year preliminary. 1. Includes miscellaneous items not shown separately. 2. Source: Economic Research Service.
3. Source: Bureau of Labor Statistics. *Information contact: John Jones (202) 694-5614*

Food Supply & Use

Table 39—Per Capita Consumption of Major Food Commodities[1]

See *Agricultural Outlook*, June-July 2001