

AGRICULTURAL OUTLOOK



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Ag Exports . . . Farm Policy . . . Food Prices . . . Cuba's Trade Potential . . . Onion Consumption . . . Clean Water Action Plan . . .

U.S. Exports: Volume Up, Value Down in Fiscal 1999

The value of U.S. agricultural exports in fiscal 1999 is projected at \$52 billion, down \$2.5 billion from the revised 1998 forecast. While overall volume is projected to increase nearly 5 percent, total value is declining because prices for a number of key commodities are forecast lower. The value of bulk exports is forecast at \$18 billion in 1999, down \$2 billion from 1998. Behind the drop in prices and total export value are three major factors: large world supplies, weak global demand, and a strong U.S. dollar.

Low Prices Test 1996 Farm Act

This year's significant decline in prices for many crops has raised questions about policy tools for counteracting current low prices. Payment rates for the new production flexibility contract (PFC) payments under the 1996 Farm Act are fixed and not related to prevailing market conditions, unlike income support payments under previous legislation. The countercyclical policy response under current law is provided by two other key policy tools—non-recourse marketing assistance loans and loan deficiency payments. With declining commodity prices, farmers are taking advantage of these two programs.

Food Price Rises in 1998, 1999 Lowest in 5 Years

Large supplies of meats and a low general inflation rate in 1998 are benefiting and will likely continue to benefit consumers. With 8 months of Consumer Price Index (CPI) data already collected, the annual average food CPI is 2.1 percent above the first 8 months of 1997. Food prices are forecast to increase only 2 percent in 1998 and 2-2.5 percent in 1999. Such modest increases have not been seen since 1992 and 1993, when food prices increased only 1.2 and 2.2 percent.



Cuba's Agricultural Trade Potential

After the loss of Soviet subsidies in the early 1990's, Cuba responded in part to the resulting economic crisis by beginning to open its economy to market forces and to pursue more open trade with other countries in the hemisphere. Initiating market-oriented reforms, allowing foreign investment, and promoting diversified exports sets the stage for economic recovery. If Cuba joins the global market economy, its economic and agricultural influence in the Caribbean could increase significantly. Should U.S.-Cuba trade open, Cuba could be a new source for U.S. agricultural and food product imports—such as sugar, vegetables, tropical and citrus fruits, seafood, and tobacco—and a destination for both U.S. investment and agricultural exports.

Onions: Sweet Smell of Success

Onions rank fourth among U.S. vegetables in per capita consumption as well as in value (behind potatoes, tomatoes, and lettuce). Onion consumption in 1997, at 18.8 pounds per capita, was just under the record of 18.9 pounds set in 1995. From 1995 to 1997, farm cash receipts for onions averaged \$711 million—5 percent of receipts for all vegetables—with an

estimated retail value of over \$2 billion. Output and per capita use of the two major categories of bulb onions grown in the U.S.—storage onions and the milder spring/summer varieties—have increased during the 1990's. The U.S. is a net exporter of fresh and processed onions, with exports totaling \$169 million in 1997 and imports at \$131 million.

Hired Farm Labor in U.S. Agriculture

In 1997, the Department of Labor certified that U.S. workers were unavailable to fill 23,352 farm jobs, mostly in the Southeast, opening them to temporary foreign guestworkers through the H-2A provisions of the Immigration and Nationality Act. The number is up from 17,557 in 1996 and 12,173 in 1994. Increased enforcement of immigration laws has led many farm employers to fear the loss of much of the current labor supply in agriculture—estimates of the share of fraudulently documented workers in the domestic hired farm labor force range from 25 to 75 percent. In response, the U.S. Senate passed a bill in July to streamline the current H-2A procedures, leading to intensified debate over the need for foreign guestworkers to supplement the domestic hired farm labor force.

Clean Water Action Plan To Affect Agriculture

An ambitious Federal proposal for improving and protecting water quality could affect the way farmers manage their land in many parts of the country. Issued in February, the Clean Water Action Plan (CWAP) is a guidepost for future national water quality policy, involving a fundamental shift to emphasize control of nonpoint sources of pollution. Runoff from cropland and feedlots in agriculture is among the largest single contributors of nonpoint-source water pollution in the U.S. On September 17, the Administration announced a major national strategy for managing livestock waste, as part of the CWAP.

Briefs

Livestock, Dairy, & Poultry**Cattle Prices To Rebound in 1999**

Record high average slaughter weights and continued beef herd liquidation of both cows and heifers this spring and summer have pushed this year's beef production to near-record levels, resulting in weak cattle prices. But 1999 will mark a dramatic change, with sharply curtailed feeder cattle supplies and a large decline in beef production. Lower supplies will lead to stronger prices and a much-awaited return to profitability for producers, but beef's share of the retail market will decline. Resuming its long-term trend, consumption is expected to drop to near 63 pounds per person (retail weight) in 1999 and even lower in 2000, after rising to 68 pounds in 1998.

Improved fall forage conditions in the Southern Plains and much of the Southeast remain critical to ending the liquidation phase of the present cattle cycle, which has lasted longer than expected. As grazing conditions deteriorated this summer, producers reduced cow herds, retained fewer replacement heifers, and weaned this year's calf crop at lighter weights. Herds will have to be cut further if sufficient forage is not accumulated by

late fall to carry the reduced beef cow inventory through the winter.

The midyear cattle inventory report indicated that producers continue to delay the beginning of female retention for herd expansion, ensuring that beef production will decline sharply for at least the next 2 years. Many beef replacement heifers were sold and placed in feedlots this spring, reflecting the deteriorating forage conditions.

The current cattle cycle began in 1991 as inventories began expanding from a cyclical low of 95.8 million head on January 1, 1990. After peaking at 103.5 million head in 1996, the cattle inventory declined to 99.5 million head on January 1, 1998. The inventory will continue to decline for the next couple of years, almost certainly falling below 97 million head by January 1, 2000.

The July *Cattle* report indicated a decline of about 2 percent for the July 1 total cattle inventory and for beef cows, with the 1998 calf crop also estimated to drop 2 percent. The beef cow inventory is the

smallest since 1992, while the projected calf crop would be the lowest since 1951. Perhaps the most telling sign of future declines in the cattle inventory is the 6-percent decline in beef replacement heifers. In addition, heifers on feed on July 1 were up from a year earlier and up sharply from 2 years ago. If rebuilding of the cattle herd were underway, many of these heifers would have been bred this summer to calve during the first half of 1999. The next opportunity to increase the calf crop will be to retain heifers from this year's calf crop for breeding next summer and calving during 2000.

Also down is the supply of feeder cattle outside feedlots, off nearly 2 percent from a year earlier and the lowest on July 1 since 1993. Supplies will only get tighter over the next couple of years as calf crops decline and as some heifers are retained for herd replacement. Feeder cattle imports will show little increase over the next few years as Mexican and Canadian cattle inventories are also being reduced.

Beef production is expected to drop sharply in 1999, reflecting the sharply reduced cattle inventory. Production for the year is expected to decline about 7 percent, with even sharper declines occurring next summer as heifer retention begins. Slaughter is expected to decline about 2

U.S. Livestock and Poultry Products—Market Outlook

		Beginning stocks	Production	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price
								Total	Per capita	
					Million lbs.				Lbs.	\$/cwt
Beef	1998	465	25,759	2,536	28,760	2,110	400	26,250	68.0	62-63
	1999	400	24,006	2,760	27,166	2,155	350	24,661	63.3	69-75
Pork	1998	408	18,822	640	19,870	1,245	475	18,150	52.1	33-34
	1999	475	19,580	700	20,755	1,300	490	18,965	54.0	32-35
Broilers	1998	607	27,558	5	28,169	5,008	600	22,561	72.5	62-63
	1999	600	28,943	4	29,547	5,025	650	23,872	76.1	56-61
Turkeys	1998	415	5,246	1	5,663	461	400	4,801	17.8	60-61
	1999	400	5,235	1	5,636	500	400	4,735	17.4	60-64
Eggs*					Million doz.				No	c/doz.
	1998	7.4	6,622.3	5.9	6,635.6	226.2	10.0	5,478.3	243.2	75-77
	1999	10.0	6,765.0	4.0	6,779.0	243.0	10.0	5,556.0	244.5	70-76

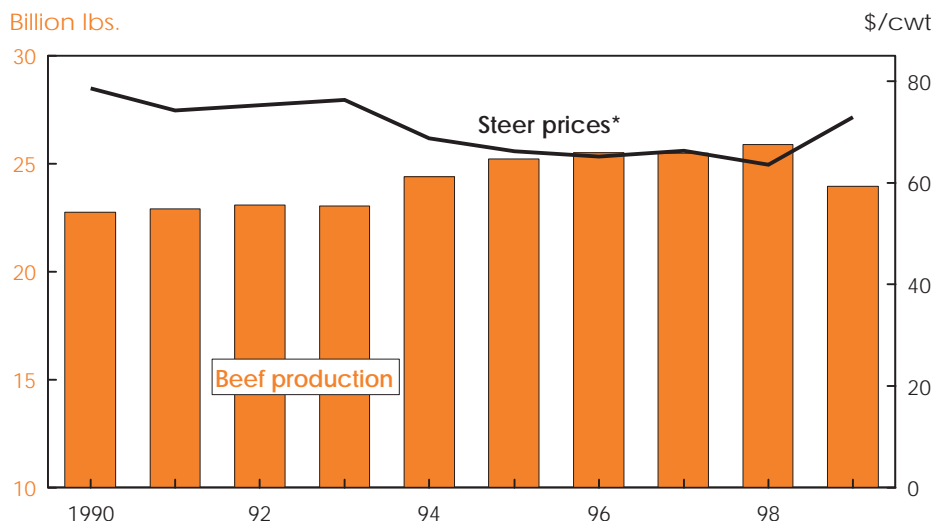
Based on September 11, 1998 *World Agricultural Supply and Demand Estimates*.

*Total consumption does not include eggs used for hatching.

See appendix tables 10 and 11 for complete definition of terms.

Economic Research Service, USDA

Dropoff in Beef Production To Boost Prices in 1999



1998 and 1999 projections.

*Choice steer prices, Nebraska, Direct, 1,100-1,300 lbs.

Economic Research Service, USDA

million head in 1999, with commercial dressed weights dropping to near 713 pounds per head, down from a projected 721 pounds in 1998. Production in second-half 1999 is expected to decline 5 to 9 percent, with similarly large declines in 2000. The extent of the production decline in 2000 will be mostly a function of how many heifers are retained over the next couple of years.

But before production begins to sputter, a new record for *commercial* beef production will be set in 1998. (The 1976 record for *total* beef production—based on 42.7 million head—will remain because farm slaughter and production is considerably less now.) This year's record will be based on commercial cattle slaughter of about 35.6 million head, with average commercial dressed slaughter weight at 721 pounds.

Beef production is expected to remain large through mid-fall, with average slaughter weights remaining at record levels—near the August record average weight of 740 pounds for federally inspected dressed carcasses. Weights usually rise seasonally through mid-fall, but

are likely near their peak at present as slaughter of heifers (lighter weight) will comprise a relatively larger share of the total through fall. Even though dressed weights will likely set a record for this fall, fourth-quarter production will be down slightly from a year earlier as slaughter finally falls below a year earlier.

Fed cattle prices likely hit their lows this summer, averaging a little below \$60 per cwt in July and August. Prices will remain under pressure through mid-fall, but expectations of reduced production by late fall (and throughout the next several years) should cause fourth-quarter prices to reach the low to mid-\$60's, up from nearly \$60 this summer. Fed cattle prices are expected to rise to the low- to mid-\$70's in 1999. Highest prices are likely to occur in late spring to midsummer as the summer barbecue season encounters the tightest supplies since 1993. Reduced world beef supplies will lead to a resurgence of prices for beef trimmings from a lower supply of lighter-weight fed cattle slaughter.

Per capita beef consumption is projected at 68 pounds (retail weight basis) in 1998, up

from 67 pounds last year and the largest since 1989. Prices for Choice beef at retail are expected to average about \$2.76 a pound, down from 1997's \$2.80 average.

In 1999, choice retail beef prices are expected to average near \$2.84 a pound, the highest since 1993's record \$2.93 a pound. Although beef prices are expected to rise as supplies plummet, large supplies of lower-priced competing meats will limit beef price gains. Consumption is expected to decline to 63 pounds per capita in 1999, the lowest since well before the advent of the commercial cattle feeding industry in the 1960's.

Consumption of other meats is forecast at about 150 pounds in 1999, resulting in a 2-percent year-over-year drop in beef share of total meat consumption.

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Upcoming Reports—USDA's Economic Research Service

The following reports will be issued electronically on dates and at times (ET) indicated.

October

- 2 *Aquaculture**
- 13 *Feed Outlook (4 p.m.)***
- 13 *Wheat Outlook (4 p.m.)***
- 14 *Fruit and Tree Nuts Yearbook**
- 20 *Agricultural Outlook**
- 23 *U.S. Agricultural Trade Update (3 p.m.)*
- 30 *Oil Crops Yearbook**

*Release of summary, 3 p.m.

**Available electronically only.

Briefs

Specialty Crops

U.S. Pear Production Down

The 1998 U.S. pear crop is forecast at 1.8 billion pounds, down 12 percent from the previous year's near-record production, primarily due to reduced production in the Pacific Coast region. Pacific Coast production of Bartlett pears is expected to be down 15 percent, while output of other varieties in the U.S. is forecast down 9 percent. Bartlett pears (a summer variety) are primarily used for canning, although some reach the fresh market, especially early in the season. Other varieties (fall and winter pears) are intended mostly for fresh use.

Over the last 3 years, California, Washington, and Oregon production of Bartlett pears averaged 53 percent of total U.S. pear production. As a result of hail damage, cooler temperatures, and above normal rainfall during the spring, California—which produces more than 50 percent of the Pacific Coast Bartlett pear crop—is expected to see production drop 4 percent compared with 1997. Washington and Oregon are expecting even greater declines—27 and 20 percent. In addition, the unusually cool spring has slowed development of the crop, so most

growing areas have started harvesting later than usual.

Reduced production of pears this year indicates higher prices for fresh-market pears in the 1998/99 marketing year. However, abundant supplies of apples—which compete with pears in the fresh fruit market—and increased fresh pear inventories from last year's record production could keep prices from rising sharply, especially later in the season.

Monthly grower prices for fresh-market pears during the first 6 months of 1998 averaged sharply lower than a year ago, reflecting record fresh-market production in the fall of 1997. In spite of monthly fluctuations, prices generally moved up—from 12.7 cents per pound (\$253 per ton) in January to 17.7 cents per pound (\$353 per ton) in June—as the 1997/98 season came to a close.

With the beginning of the 1998/99 marketing season, grower prices in July and August rose to an average of about 22 cents per pound (\$431 per ton), 28 percent higher than the same period in 1997,

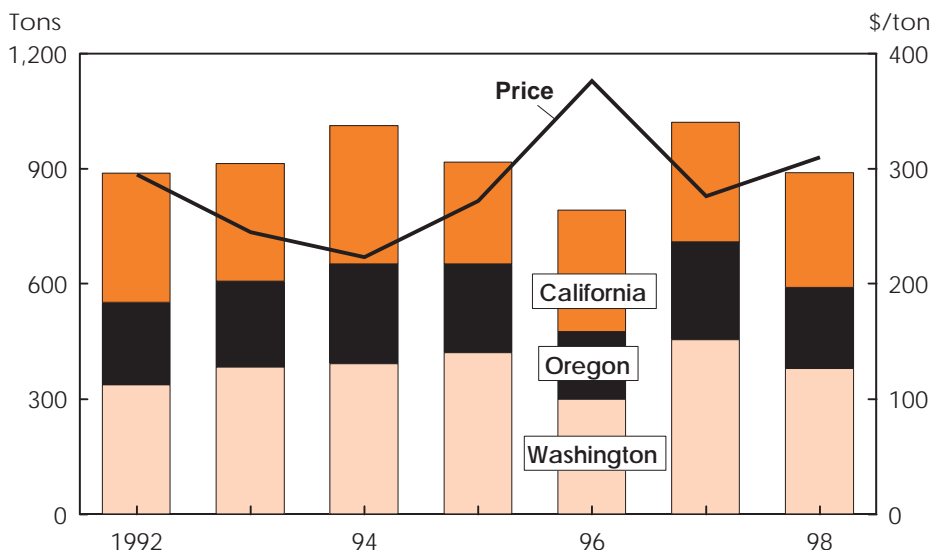
reflecting the expected smaller 1998 crop and a late-starting California Bartlett pear harvest. While expected stronger than last year, prices could decline seasonally in the next few months, particularly as production in Washington and Oregon overlaps with some of California's production.

Increased production in 1997 led to lower U.S. imports of fresh pears during the 1997/98 season. Imports from July 1997 to June 1998 totaled 149.6 million pounds, down 13 percent from the previous season. Meanwhile, U.S. exports of fresh pears jumped 38 percent to a record 363.2 million pounds.

In addition to record U.S. production of fresh-market pears, good fruit quality from the U.S. crop and smaller exportable supplies from the European Union (EU) helped boost exports in 1997/98. Canada and Mexico together account for over half of U.S. fresh pear exports, and the EU, Brazil, and Taiwan are also important markets for U.S. pears. Exports to Canada, Mexico and the EU were up sharply, while shipments to Brazil and Taiwan dropped 3 and 15 percent. Exports to much smaller markets in Asia—such as Malaysia, Indonesia, the Philippines, and Vietnam—also fell sharply, reflecting the currency devaluations in these countries, while exports increased markedly to Hong Kong and Japan. The Asian financial crisis will likely continue to slow shipments of U.S. pears to many Asian markets in 1998/99, and along with the expected smaller fresh-market production in 1998, will likely curtail exports in 1998/99.

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U.S. Pear Production Drops in 1998



1998 forecasts. Excludes small amounts from other States.
Economic Research Service, USDA

Commodity Spotlight



Gary Lucier

Onions: The Sweet Smell Of Success

Onions rank fourth among U.S. vegetables in per capita consumption as well as in value (following potatoes, tomatoes, and lettuce). Onion consumption in 1997 was, at 18.8 pounds per capita, just under the record high of 18.9 pounds set in 1995. From 1995 to 1997, farm cash receipts for onions averaged \$711 million—5 percent of receipts for all vegetables—with an estimated retail value of over \$2 billion. The U.S. is the world's third-largest producer of onions, with production up 46 percent between 1985-87 and 1995-97.

Onions' prominent role may seem surprising, since onions are not major plate vegetables and lack the visibility of commodities like potatoes and tomatoes. But onions frequently work in the background, adding flavor and texture to a wide variety of dishes.

Onions are a versatile vegetable used in fresh, canned, frozen, and dehydrated forms. In addition to use as a cooking ingredient in countless recipes, onions are frequently used as a condiment, sandwich ingredient, side dish, and appetizer. Fresh onions can be barbecued on shish kebabs, stuffed and roasted, or used to flavor meat dishes.

While the fresh market accounts for the largest share of onion use, other forms account for a significant share. Most onions used in canning and freezing are taken from fresh-market varieties while dehydrated products use varieties with high solids content. Onions in frozen form are estimated to account for close to 10 percent of all onions consumed.

Both fresh and dehydrated onions appear in a wide variety of canned and frozen products such as salsa, soups, stews, salad dressings, and pickled products. Some fast-food hamburgers are topped with dehydrated (reconstituted diced/minced) onions. Dried and dehydrated onion products are manufactured for both domestic and export markets.

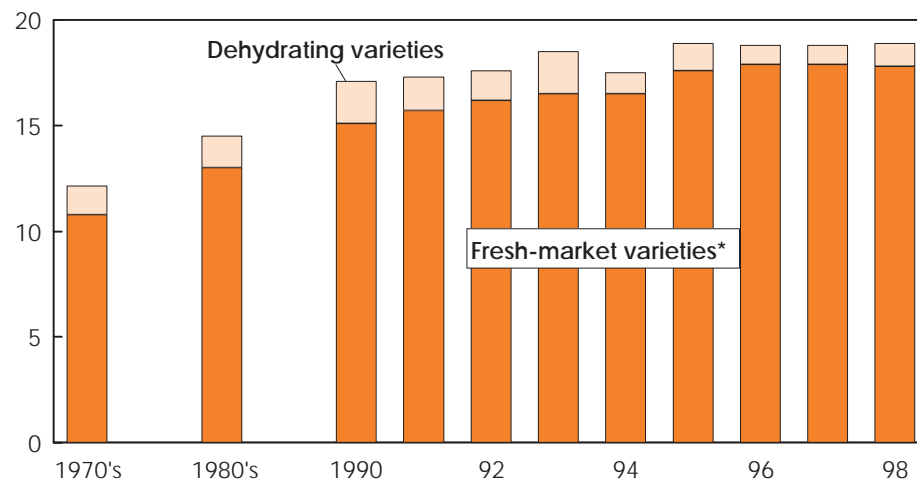
Onion Use Is Up

Two major categories of bulb onions, which the industry refers to as spring/summer varieties and storage varieties, are grown in the U.S. Both storage and spring/summer onion types can be yellow, white, or red. Spring/summer varieties are characterized by juiciness, fragility (a thin, light-colored skin), sweet, mild flavor (less pungent with a higher sugar and water content), and shorter shelf life. Among the familiar trade name varieties of spring/summer onions are Vidalia, Walla Walla Sweets, Sweet Imperials, Nu-Mex Sweet, and Texas 1015 (1015 refers to the October 15 planting date).

Storage varieties (including those used for processing), which are harvested during the late summer and fall, account for three-fourths of the U.S. onion market. These varieties tend to have a stronger, more pungent flavor and are well suited for longer-term storage and processing. The Northwestern States (Washington,

U.S. Per Capita Onion Consumption Is Up in the 1990's

Lbs. per person



1998 forecast.

*Most canned and frozen onions are taken from fresh-market varieties.

Commodity Spotlight

Oregon, and Idaho) produce 48 percent of the U.S. fresh-market storage onion crop.

Under proper conditions, these onions can be stored for later marketing for up to 8 months. Some shippers keep onions in climate-controlled refrigerated storage where the ideal temperature is 32° F (onions freeze at 30.6° F). On average, about 15 percent of the storage crop is lost to shrinkage (moisture loss) and sorting loss (defects found while packing).

For most of the year, the storage onion crop sets the pricing tone for the market. Since storage onions represent a majority of the crop, shipping-point prices tend to be lowest around the peak of harvest in September and October. Onion prices then begin to rise from this low, reflecting the costs of storing the crop as well as other factors, and reach a peak in April when marketing of the storage crop is complete and mild spring/summer onions are just coming onto the market. Over each of the past three decades, April prices have averaged a third higher than the annual average, while October prices have been a fifth below the annual average.

Per capita use of onions has been expanding since the 1970's. Fresh use (which also includes freezing and canning) is currently at a record-high 17.9 pounds, with use of dehydrating onions at 0.9 pound (fresh-weight basis). Fresh use is 38 percent above the average of the 1980's and 66 percent above the 1970's. Dehydrated use equals the average of the 1970's but is down 10 percent from the 1980's. These trends may reflect the overall move toward fresh and frozen produce in the foodservice industry over the last decade.

Consumption of the spring/summer onion varieties—sweet and less pungent—is undoubtedly up strongly this decade. These varieties are popular for salads and on sandwiches but have not been the primary driving force in raising overall onion consumption. The more pungent storage varieties, which tend to impart more flavor to cooked dishes and have a longer shelf life, still dominate the market. Consumers, food manufacturers, and foodservice operators base their onion purchases largely on the intended use.

Onion Roots & Relatives

Onions are classified as members of the *Amaryllidaceae* (amaryllis) family but are also sometimes included as members of the lily family. Onions, *Allium cepa*, are a cool-season crop (tolerant of frost) botanically related to shallots, garlic, leeks, and chives. Onions are believed to have originated in the regions around Iran and Pakistan, and ancient Egyptian tombs contain references to onions. Onions made their way into Europe during the Middle Ages, eventually reaching the U.S. The various types of onions include subcategories of the major bulb onion categories as well as onion relatives.

Boiler/creamer—small-sized common bulb onions between 1 inch and 1 7/8 inches in diameter; popular as boiled onions and in onion cream sauces.

Picklers—small-sized common bulb onions not greater than 1 inch in diameter.

Green onions—common bulb onions, also known as scallions, that are harvested in the green immature stage prior to formation of a large bulb; used in salads and Chinese dishes; the green tops are high in vitamins A and C.

Pearl onions—small (less than 0.63 inch in diameter) white, red, or golden yellow bulbs popular for pickling, shish kebabs, and casseroles; bulb is botanically different from the common onion but has a crisp texture and mild onion flavor.

Leeks—related to the pearl onion but generally without a bulb; mild flavor is less pungent than most onions; popular in stir-fry, soups, salads, and vichyssoise. Popular in Europe, leeks are a national emblem of Wales.

Shallots—related to the onion family and have the appearance of small onions; mild taste resembles that of garlic; usually sold dried and used for boiled or sauce onion dishes; green shallots available during the summer.

Chives—long, thin, delicate green herblike plants, used primarily as a garnish and a flavoring agent; generally form no bulbs; also grow in the wild in the U.S.

Onion sets—vegetative small bulbs (not seeds) used to establish a planting; generally produced in the fall and planted in late winter/early spring for production of green onions or dry-bulb onions; popular with home gardeners.

Dehydrating onions—dry-bulb storage onions intended for manufacture into various dried products; generally contain higher soluble solids than those intended for the fresh market.

Onion juice—also known as onion oil, an extract of storage-type onions used largely by food manufacturers to enhance flavors; produced in very small quantities.

Onion demand during the 1970's rode the increasing popularity of fast-food hamburger chains that featured onions on burgers and onion rings as side orders. In the 1980's, the booming popularity of salad bars added another layer to onion demand. By the end of the decade, onion demand was gaining from the growing popularity of pizza, pasta, salsa, and other ethnic cuisine. The booming economy of the 1990's has propelled demand for away-from-home foods, in many of which onions play a role.

The shortages and high costs of urban labor in the 1990's has likely increased demand for yet another onion product. Food manufacturers and restaurants are finding it economical to purchase onions and other produce in pre-prepared forms. Whole-peeled onions and various sliced, diced, and chopped products save time and labor costs for end-users. Demand for these products provides jobs and boosts the economy of rural areas where much of the processing takes place.

Commodity Spotlight

In the 1990's, some restaurant chain menus added a specially sliced fried onion appetizer. Made largely from storage varieties, these products have apparently increased demand for the larger-sized onion bulbs, which foodservice operations have always preferred since they are easier to chop and slice. Output of storage onions, accounting for a majority of the fresh dry-bulb market, is up 41 percent between 1985-87 and 1995-97.

Onions also have natural qualities that make them attractive to consumers, particularly in today's health-conscious market. For centuries, onions have been thought to have certain medicinal and disease prevention powers; modern science has begun to show that there may be some fact in the ancient lore. Onions contain an antioxidant (quercetin), which according to some studies may be capable of inhibiting growth of certain cancer cells. Onions also contain compounds that reportedly reduce blood cholesterol levels. At the same time, onions are low in calories and are a source of dietary fiber. Bulb onions also provide vitamin C, with one medium onion providing 15 to 20 percent of the daily requirement.

Four Federal marketing orders exist for onions—Georgia Vidalia onions, Walla Walla Valley (Washington/Oregon) onions, Idaho/Eastern Oregon onions, and onions grown in south Texas. Each order, funded through assessments on onion shippers, authorizes promotion, paid advertising, and research and development in production and marketing. In addition, the Walla Walla order regulates the markings placed on onion containers, while the Idaho/Oregon and south Texas orders authorize grade, size, quality, maturity, and pack or container regulations. The minimum grade, size, quality, and maturity regulations also apply to imported onions when the Idaho/Oregon and south Texas orders are in effect (early June-early March for Idaho/Oregon and March to early June for south Texas.).

Western States Dominate Onion Market

U.S. output of both spring/summer and storage onions has increased during the decade. Production of *storage* onions has become more geographically concen-

trated. California, Oregon, and Washington produced 62 percent of the storage crop (including onions for processing) during 1995-97, compared with 57 percent during 1985-87. Production has been shifting to western States, with Mountain and Pacific States producing 87 percent of the U.S. storage onion crop during 1995-97, compared with 81 percent in 1985-87.

Fertile soils, irrigation, and fewer cloudy days (more sunlight) make higher yields possible in many western States. While western production has been on the rise, output in New York has changed little over the past decade, although the State's market share of storage onions fell from 8 percent to 5 percent of the national total.

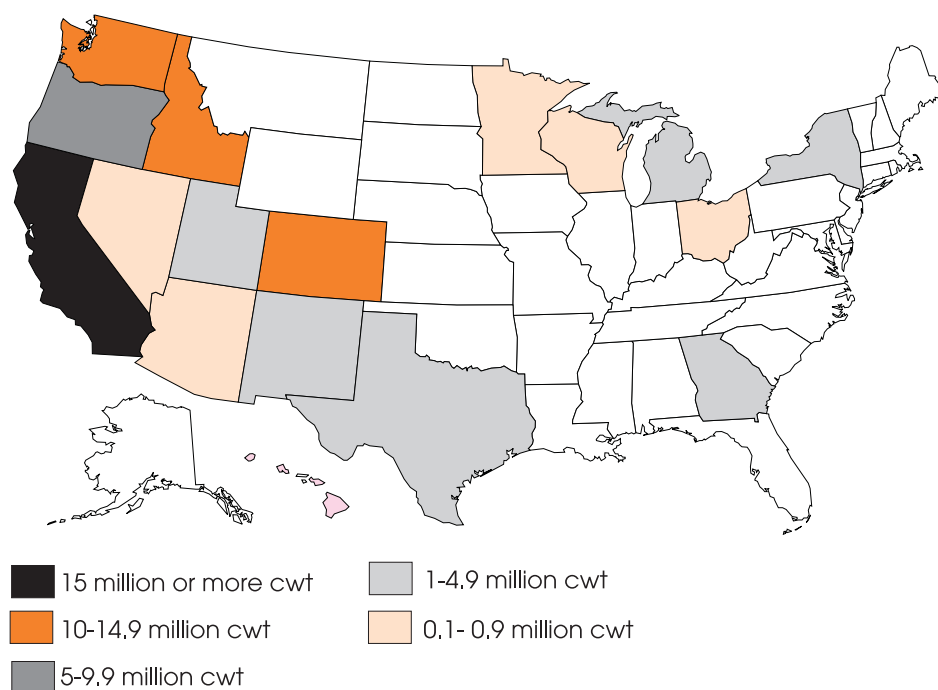
Output of *spring/summer* onions is up significantly, but gains have not been shared equally. The industry has experienced strong increases in Georgia, New Mexico, and Arizona, but no growth in other areas. In Georgia, the fastest-growing area, onion area has expanded from less than 2,000 acres in 1987 to over 16,000 acres in 1997, the result of successful national promotion of Vidalia onions.

California is the leading U.S. producer of onions, averaging 25 percent of the crop over the past 3 years. California produces most of the onions destined for dehydration. About half of the onions grown in California are for manufacture into dehydrated products like onion powder, flakes, and minced and chopped pieces. California ships fresh-market storage onions in the fall and ships mild spring/summer onions from April to June. Over the past 3 years, California has been the third leading producer of spring/ summer onions.

Oregon is the second leading onion-growing State, accounting for 16 percent of the U.S. crop. It is also the leading producer of fresh-market storage onions, growing 21 percent of the total. About 70 percent of the State's crop is grown along the Snake River in the fertile Treasure Valley, known for production of large onions. Onions are shipped August-April from Oregon.

Washington accounts for 12 percent of U.S. onion production, making it the third leading producer. About 95 percent of the State's onions are of the storage

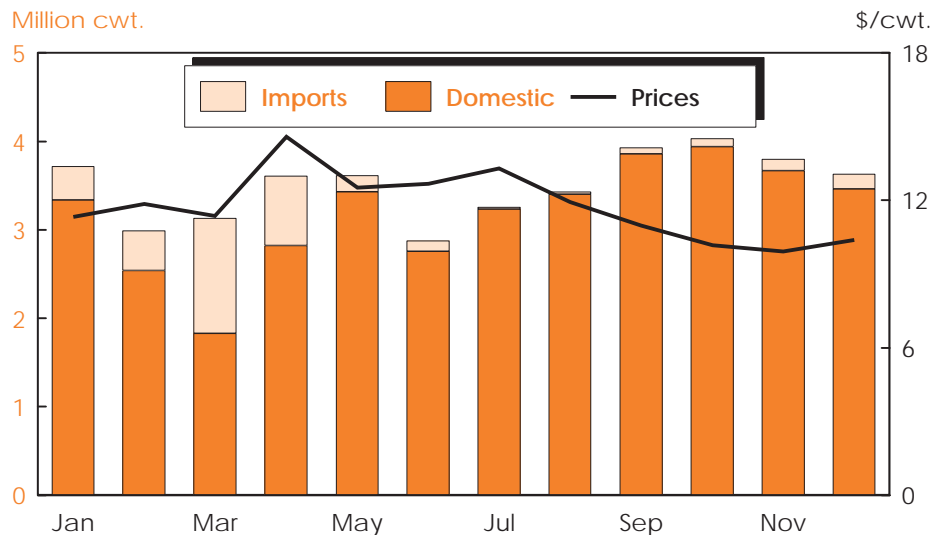
Onion Production Is Concentrated in the West



Based on 1995-97 averages.
Economic Research Service, USDA

Commodity Spotlight

Fresh Onion Imports and Prices Peak in Early Spring



1997 shipment data. Average shipping point prices, 1995-97.

Economic Research Service, USDA

type. Washington's storage onion industry has been expanding, with production in 1997 up 187 percent since 1990 and nearly six times greater than during 1980. A combination of excellent growing conditions, high yields, and favorable port access for export to Asian markets have been key. Washington ships onions from July to April.

Idaho ties with Colorado for fourth place in onion production, each accounting for 9 percent of the Nation's crop over the past 3 years. Colorado plants twice the acreage of Idaho, which has a substantial advantage in per-acre yields. The third largest producer of storage onions, Idaho, like Oregon, raises the trademark variety Spanish Sweeties. Idaho's shipping season is the same as for the Snake River area in Oregon.

About an eighth of Colorado's production is grown from transplants rather than seed. While costs are higher, this allows Colorado to begin onion shipments earlier in the season when there is less competition and the potential exists for higher prices. Harvest begins in late July, with shipments from storage completed in April.

Texas grows 6 percent of the U.S. crop, with New York and New Mexico each

holding 5 percent, and Georgia 4 percent. Georgia's crop is centered in a 20-county area around Vidalia, which gives its name to the mild variety produced there. Georgia's mild onion crop has slowly been carving out an enhanced profile in the marketplace with a combination of innovative marketing and promotional efforts. Vidalia onions are probably the most widely known trademark variety.

The U.S. Is a Net Exporter of Onions

U.S. onion production is surpassed only by China's and India's. The U.S. accounts for 8 percent of world onion output, well behind China's 25 percent and India's 11 percent.

Global per capita use of onions averaged 13.5 pounds during 1994-96, according to data from the Food and Agriculture Organization (FAO) of the United Nations. Kuwait's per capita use is highest, at 63 pounds. Turkey, the fourth leading onion producer, has the second highest reported consumption at 59 pounds per person, followed by Turkmenistan at 48 pounds. The U.S. is 37th.

The U.S. is a net exporter of fresh and processed onions—in 1997, exports

totaled \$169 million while imports were \$131 million. Imports accounted for 12 percent of the fresh-market onions consumed in the U.S. in 1997, while exports took 8 percent of available supplies. Most imports are fresh-market onions, while both fresh and dried onion products are major components of exports. Three-fourths of all fresh-market onion imports enter the U.S. market during the winter months, when fresh-market onion exports reach a seasonal lull.

Over 80 percent of fresh-market onion imports come from Mexico, while Canada and Japan are major markets for U.S. exports. Exports of fresh-market onions are sensitive to weather in major onion-consuming nations (especially in Asia), and exports tend to show the largest gains in years of poor weather. West Coast shippers, given their proximity to ports that can easily serve Asian markets, tend to dominate the onion export market.

An estimated 70 percent of the U.S. dehydrated onion crop is exported. In 1997, the U.S. shipped \$78 million in dried and dehydrated onion products to 60 different countries, with Canada, Japan, and the United Kingdom the top U.S. markets.

With strong exports earlier this year and weather-related damage and planting delays in some States, shipping-point prices for onions have continuously averaged well above the low levels of a year earlier. The U.S. spring/summer crop this year was up about 8 percent from a year earlier as higher output in New Mexico, Texas, and Arizona offset weather-induced reductions in California and Georgia. However, the fall storage onion crop is expected to be 7 percent below a year ago, due to reduced acreage and lower yields. Hail and rain damage in New York earlier this summer resulted in a 43-percent cut in output for that State. Nationally, the smaller overall crop and continued strong domestic and export demand should keep prices above year-earlier levels for the remainder of the year.

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World Agriculture & Trade



U.S. Ag Exports: Volume Up, Value Down in Fiscal 1999

The value of fiscal 1999 U.S. agricultural exports is projected at \$52 billion, down \$2.5 billion from the revised fiscal 1998 forecast. While overall volume is projected to increase by 6.7 million tons to 148.7 million tons, total value is declining because prices for a number of key commodities are forecast to be lower. Three major factors are behind the drop in prices and total export value: large world supplies, weak global demand, and a strong U.S. dollar.

All of the expected increase in export volume is in the *bulk* category, which will be the first increase in bulk volume since fiscal 1995. Wheat and corn account for the entire gain; exports of soybeans and cotton are expected to fall. Bulk export value is forecast at \$18 billion in 1999, down \$2 billion from 1998.

The value of *high-value products* (HVP's) is forecast virtually unchanged at \$34 billion in 1999. Small gains in the value of red meat and vegetable exports are offset by lower prices and lower values for soybean meal exports. The HVP share of U.S. agricultural export value continues to rise to a new record 65 percent.

The value of U.S. agricultural imports are forecast up \$1.5 billion to a record \$39.5 billion, the 12th consecutive record. But the rate of growth in imports is expected to slow from 6 percent in 1998 to only 4 percent in 1999. As a result, agriculture's export surplus in fiscal 1999 is expected to be the smallest since 1987, just \$12.5 billion.

The growth in imports in fiscal 1999 is expected to be led by horticultural products, the fastest-growing import. Gains are expected in wine, malt beverage, vegetable, fruit, and juice imports. The stronger U.S. dollar (which results in lower import prices) is key to higher imports in 1998 and 1999. U.S. consumers are turning to higher-valued imports, such as Canadian beers and Australian wines, as well as to more specialty items, such as colored peppers and hydroponically grown tomatoes.

Bulk Export Value To Decline, But Volume To Rise

Bulk export value is projected to slip 10 percent in 1999 to \$18 billion as prices continue very weak, particularly for soybeans, corn, and wheat. But volume of bulk commodity exports is expected to

rise 7 million tons to 104.5 million tons as shipments of wheat and corn increase.

Reduced competition from Canada and Argentina (from smaller crops) is expected to boost U.S. wheat and flour exports in fiscal 1999. With the larger export volume, wheat is the only major bulk commodity expected to also increase in value in 1999. Projected wheat and flour export value rises \$400 million to \$4.2 billion. However, wheat prices will remain under pressure, reflecting larger supplies in the U.S. and most major competitors, especially Australia and the European Union (EU), as well as continued weak import demand.

U.S. rice exports in fiscal 1999 are projected at 2.7 million tons (down 400,000 tons) and \$1 billion (down \$100 million). Production in Central and South America is expected to return to normal after a weather-related downturn in 1998, reducing the region's demand for U.S. rice. More normal production is also expected in South and Southeast Asia in 1999. Value will fall less than volume because the share of lower-valued rough rice is likely to decline from a high level in 1998.

U.S. corn exports for 1999 are projected up 3 million tons from 1998, but further price declines should reduce export value. Projected larger U.S. supplies and reduced competition from China, Argentina, and Eastern Europe will contribute to increased corn export volume in 1999. Prices of corn will remain under pressure because the second largest U.S. crop on record will lead to rising stocks.

This is the first forecast of 1999 agricultural exports (released August 28, 1998). *Bulk commodities* (HVP) include wheat, rice, feed grains, soybeans, cotton, and tobacco. *High-value products* comprise total exports minus the bulk commodities. HVP include semiprocessed and processed grains and oilseeds (e.g., soybean meal and oil), animals and animal products, horticultural products, and sugar and tropical products. Appendix table 27 presents a breakout of U.S. agricultural exports and imports by major commodity group—both volume and value—for 1997-99.

World Agriculture & Trade

Slow global demand for oilseed meals is likely to reduce U.S. exports of soybeans and soybean meal in 1999. Fiscal 1999 soybean exports are projected down 200,000 tons to 23.3 million tons and down \$1.1 billion to \$5.1 billion. With South American soybean carry-in stocks building (following record or near-record production in 1998) and prospects for large U.S. production, world prices are down sharply.

Among bulk commodities, U.S. cotton exports are expected to drop the most in 1999. Export volume is projected down 500,000 tons to 1.1 million tons as the drought across the largest Southern cotton-producing States reduces expected U.S. production to a 9-year low of just 13.6 million bales. This will be a 28-percent decrease in U.S. production, and export availabilities are expected to shrink correspondingly. In addition, China is expected to switch from large net importer to net export competitor for the first time in 6 years, sharply reducing global demand. U.S. export value is projected down \$900 million to \$1.7 billion.

HVP Export Value Strong Despite World Economic Slumps

HVP exports are expected to remain relatively stable in fiscal 1999, slipping just a little more than 1 percent to a forecast \$34 billion. Soybean meal exports are expected to decline, falling \$400 million to \$1.5 billion. Partially offsetting this drop will be gains in red meats, projected up \$200 million, and vegetable exports, up \$100 million.

Continued weak demand in Asia and Russia is likely to be a major factor limiting 1999 gains in U.S. HVP exports. Major Asian markets for U.S. products are expected to remain in recession in 1999. Asia's downturn will cut overall foreign Gross Domestic Product growth from 3.2 percent in 1997 to 1.9 percent in 1998.

Japan is the key to recovery in Asia. Japan's contracting economy and weak currency is delaying Asia's potential drive toward recovery and could increase the pressure on China to devalue its yuan. Russia's currency devaluation and financial crisis will have the greatest impact on the other countries of the New Inde-

Declines in Oilseed and Cotton To Push Down Total U.S. Agricultural Export Value

	1995	1996	1997	1998	1999
\$ billion					
Grain and feeds	17.6	21.6	16.5	14.0	14.0
Oilseeds and products	9.1	9.7	11.4	11.3	9.5
Livestock products	7.8	8.1	7.7	7.9	7.9
Poultry and products	2.3	2.9	2.9	2.8	2.8
Dairy products	0.8	0.7	0.8	0.9	0.9
Tobacco, unmanufactured	1.3	1.4	1.6	1.4	1.4
Cotton and linters	3.5	3.0	2.7	2.6	1.7
Seeds	0.7	0.7	0.9	0.9	0.9
Horticultural products	9.6	10.0	10.6	10.6	10.6
Sugar, tropical, and other	1.8	1.7	2.1	2.1	2.2
Total	54.6	59.8	57.3	54.5	52.0

Fiscal years. 1998 forecast; 1999 projection. Based on commodity forecasts in the August 12, 1998 *World Agricultural Supply and Demand Estimates*. Totals may not add due to rounding.

Economic Research Service, USDA

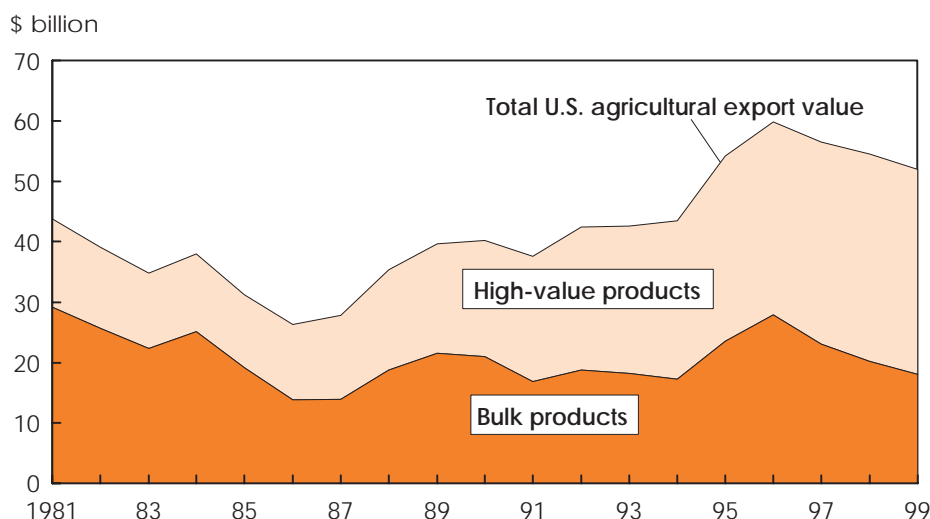
pendent States and its neighbors around the Black Sea.

Relatively weak demand prospects and rising foreign soybean carry-in stocks will constrain U.S. soybean meal exports in 1999. Soybean oil shipments, however, should remain strong at 1.3 million tons, valued at \$800 million. Global stocks of palm oil—a major competing vegetable oil—are expected to remain low with prices strong, as several years will be required to revive production from drought in Malaysia.

Red meat exports are expected to rise to \$4.3 billion in 1999, up from the \$4.1 billion estimated for 1998. Gains are expected in pork volume and beef prices. Pork shipments are being boosted by continued low pork prices. Beef export volume is expected to remain flat, hampered by recessions projected for Asia, but some recovery in beef prices is anticipated as world supplies decline.

Poultry exports are projected flat at \$2.4 billion in 1999. Russia, which accounted for 40-45 percent of all U.S. exports of poultry meat in 1997, is the greatest

U.S. Agricultural Export Value To Decline in 1999



1998 forecast, 1999 projected.

Economic Research Service, USDA

State Ag Export Rankings Changed Little in 1997

In fiscal 1997, California continued to be the largest exporting State and led in exports of four commodity groups—fruits, vegetables, tree nuts, and seeds. Nine of the top 10 leading agricultural export States—California, Iowa, Illinois, Nebraska, Texas, Kansas, Minnesota, Washington, and Indiana—remained the same as in 1996. However, Nebraska moved ahead of Texas and Arkansas moved up from 11th place in 1996 into 8th place in 1997, as a poor wheat crop pulled down total exports of several States, including 1996's 10th exporter, North Dakota. The top 10 leading States accounted for 58 percent of total U.S. agricultural export value, unchanged for the last 2 years. But as the total value of agricultural exports declined, exports from most of the major exporting States, with the exception of California and Arkansas, decreased in 1997.

The Economic Research Service (ERS) estimates export shares based primarily on State production shares of exported commodities. The data sources are crop and live-stock production and slaughter estimates from the National Agricultural Statistics Service and merchandise export data from the Bureau of Census. The census export data are reported on a free-along-ship (f.a.s.) basis by customs district and country of destination, but no State of origin is reported in the data set. In some cases, supplemental data—such as the *Census of Agriculture, 1992* and the Department of Commerce's *Exports from Manufacturing Establishments: 1990 and 1991*—were used to estimate export shares.

The estimated export value for each State should not be interpreted as actual measurements of a State's exports. An agricultural commodity is likely to pass through several States before being exported, and the State of origin is lost as commodities move from farmgate to port. To help compensate for this, class-specific production data are used to

California Is the Leading U.S. Agricultural Exporting State

	1995	1996	1997
	\$ billion		
U.S.	54.6	59.8	57.3
California	7.0	7.2	7.7
Iowa	4.0	4.6	4.1
Illinois	3.5	4.0	3.7
Nebraska	3.2	3.5	3.3
Texas	3.4	3.5	3.1
Kansas	3.1	3.1	2.7
Minnesota	2.4	3.0	2.6
Arkansas	1.6	1.7	1.9
Washington	1.8	1.9	1.9
Indiana	1.8	2.0	1.9

Fiscal years.

Economic Research Service, USDA

calculate export shares when available. For example, export figures from States in the Pacific Northwest reflect white wheat exports (the share of white wheat production that is exported is larger than for other classes of wheat). A similar procedure is used for cotton and rice. Product use data (i.e., fresh-market and processed) are employed for fruits and vegetables.

The detailed commodity breakdown by State is available on the ERS Autofax System at 202-694-5700. Request documents number 16010 (12 pages, 5 years of data for all commodity groups in all States), number 16020 (a 1-page summary of top 10 States by commodity), and number 16021 (a 1-page summary of 5 years total agricultural exports, all States).

source of uncertainty for 1999. On the one hand, Russia's current financial crisis is likely to limit its imports. But on the other, poultry is the least expensive meat in Russia and its vastly shrunken domestic poultry industry is probably not capable of expanding quickly to meet demand.

U.S. horticultural exports are forecast unchanged at \$10.6 billion for fiscal

1999. Relatively strong prospects for economic growth in North America, coupled with reduced trade barriers under the North American Free Trade Agreement, are helping boost vegetable exports to Canada and Mexico, offsetting the weakened prospects for exports to Asia. Vegetable exports are projected up slightly to \$2.9 billion in 1999. Exports of fruits, wine, nuts, and other beverages

also have remained strong in 1998, despite the weakness in Asian demand and the strong U.S. dollar, and are expected to retain this buoyancy in 1999. Fruit exports are projected at \$3.3 billion and nuts at \$1.3 billion, both about the same as in 1998.

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Policy



Jack Harrison

Low Prices Test 1996 Farm Act

This year's significant decline in prices for many crops has raised questions about which policy tools are available to counteract current low prices.

In the last year, farm prices for several major crops have dropped sharply and are much lower than at any time in the recent past. The decline is due to large U.S. and foreign supplies, lackluster export demand due to weak economic performance in many foreign countries, and a strong U.S. dollar. From August 1997 to August 1998, the average farm price fell nearly a third for wheat (the lowest monthly price in 7 years) and one-fourth for corn (lowest in 10 years) and for soybeans (lowest in 4 years).

Prior to the 1996 Farm Act, farmers who participated in farm programs for major field crops received *deficiency payments* from the government when prices dipped below a certain level under the old target price/income support program. Deficiency payments rose when prices fell, and the intended effect was to stabilize farm income and provide some offset to declining prices.

The recent decline in crop prices likely would have led to higher 1998 income support payments under the old law than

are scheduled to occur under current law. Unlike under the old law, payment rates for the new *production flexibility contract (PFC) payments* under the 1996 Act are fixed and not related to prevailing market conditions.

Assuming current loan rates and with USDA's September 1998 projected market prices, deficiency payment rates in 1998 for corn and wheat under the old law would have been about double the 1998 payment rates for production flexibility contracts. However, deficiency payments for corn and wheat would not have been double the actual PFC payments, largely because of lower program participation under old law. During the first 2 years of the 1996 Act when crop prices were high, actual PFC payments to farmers exceeded levels that would have occurred under the old law. The 1996 Farm Act, in decoupling farm prices from program payments, intended that farmers make planting decisions according to the market conditions for particular crops.

What can help farmers get over the financial hump during this downturn in prices as the market works down its large supply?

Perhaps the most visible policy response is early disbursement of fiscal 1999 farm program payments. Under legislation

signed into law in August 1998, participating farmers will have the option to receive their entire fiscal 1999 payments as early as October 1998, rather than receiving half in mid-December or mid-January and the rest by September 1999 as had been provided under the 1996 Act. Total PFC payments will amount to about \$5.65 billion for fiscal year 1999, typically representing about 10 percent of farm net cash income. Shifting a portion of these payments to earlier in the fiscal year under the new legislation will inject cash into farmers' bank accounts at a time when market prices are low.

Two other key policy tools are *nonrecourse marketing assistance loans* and *loan deficiency payments (LDP)*. These farm programs, which predate the 1996 Act, provide a countercyclical policy response when prices decline. Farmers are taking advantage of these programs, and money is flowing into the agricultural sector.

Loans & LDP's Shore Up Contract Payments

Nonrecourse marketing assistance loans provide interim financing to eligible producers of wheat, corn, grain sorghum, barley, oats, soybeans, minor oilseeds, rice, upland cotton, and extra-long staple cotton. Instead of selling the crop, farmers pledge the crop as collateral and use the loan proceeds to cover short-term cash needs. Loans may be taken out at any time following harvest through the following March or the following May, depending on the crop. However, most loan placements occur shortly after harvest when prices tend to be seasonally low. Farmers may repay the loan (plus interest) anytime prior to maturity and then sell the crop in the marketplace, or they can forfeit the collateral to the government as full pay-

More information on nonrecourse marketing assistance loans and loan deficiency payments is available from USDA's Farm Service Agency at <http://www.fsa.usda.gov/pas/backgn-drs.htm>. The latest figures on loan and payment activity are available at <http://www.fsa.usda.gov/dafp/psd/> under *online reports*.

ment when the loan matures in 9 months (10 months for cotton).

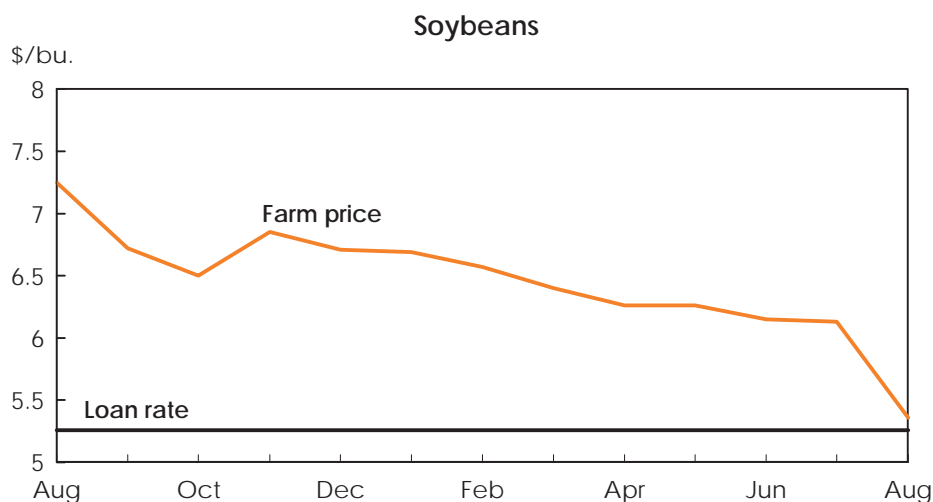
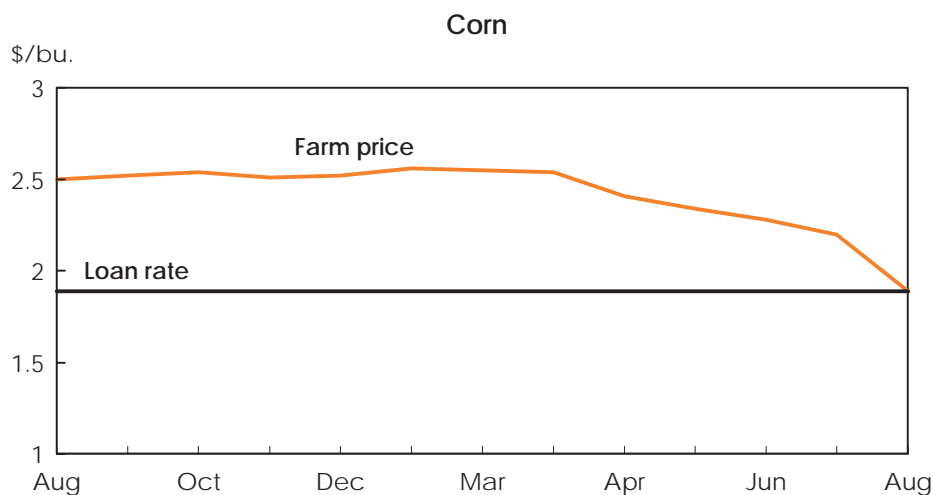
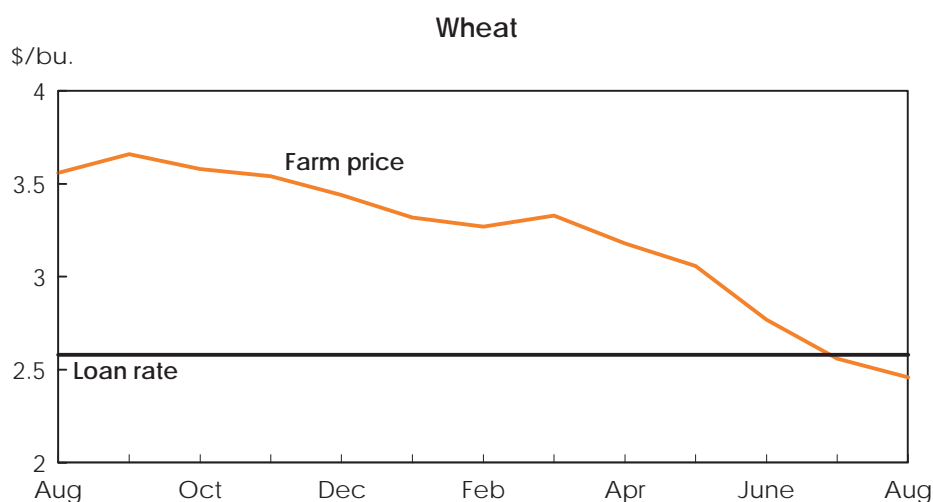
The loan program provides an effective per-unit revenue floor for farmers who put their crops under loan, with a countercyclical effect occurring once prices drop below the loan rate. For example, the national loan rate is \$2.58 per bushel for wheat. Excluding adjustments for quality and location (each county where wheat is stored has a loan rate), farmers will receive at least this per-unit amount for their wheat, on average, minus interest charges.

The loan repayment rate may actually be less than the loan rate (plus interest) if the local price—called the posted county price or PCP—falls below the loan rate. (The PCP—calculated each day the Federal Government is open—is based on terminal market prices and a fixed differential to each county, largely reflecting transportation and other marketing factors.) When a farmer repays the loan at a lower PCP, the difference between the loan rate and the PCP is called a *marketing loan gain*. In addition, any accrued interest on the loan is waived when the PCP is under the county loan rate on the day the producers repays the loan.

The marketing loan repayment feature prevents a costly buildup of publicly owned stocks that would occur if many farmers forfeited their grain to the government as repayment of loans. Without the marketing loan feature, farmers would forfeit their grain if prices did not rise to at least the loan rate during the 9- to 10-month loan period. Under the marketing loan program, farmers may effectively receive a net per-unit revenue equal to the loan rate.

While the loan program provides a per-unit revenue floor for producers, it does not establish a floor for *market* prices since commodities can enter the market at prices below the loan rate (hence the phrase “marketing loan”). A price floor in the domestic market would prevent U.S. prices from following foreign price declines, and thus could reduce international competitiveness for U.S. commodities (as was the case when loan rates were high and marketing repayment features were not available in the early 1980’s).

Wheat Prices Had Dropped Below the Loan Rate by August



Average monthly farm prices. August 1998 preliminary.
Economic Research Service, USDA

Policy

If the PCP is below the loan rate, eligible producers may opt for a **loan deficiency payment (LDP)** for commodities in lieu of securing a loan. The LDP rate is the amount by which the loan rate exceeds the PCP and is calculated each day the Federal Government is open. (The crop cannot go under loan once an LDP is paid.) This option is attractive if the producer thinks that market prices have bottomed out and the LDP rate has reached its maximum. LDP's may also be attractive to producers because by taking the LDP and immediately selling their crop, they effectively receive a per-unit revenue equal to the loan rate, partly from the market and the rest from the government. After an LDP is accepted, the farmer can sell the crop to avoid storage expenses or hold it in the expectation of a price rally.

Loan deficiency payments are final, unlike the regular deficiency payments under the old target price/income support program. Under the old income support program, farmers were required in some instances to return all or part of their advanced deficiency payment (but not loan deficiency payments) once final payment rates were calculated, which was after the marketing season concluded.

Government Payments Increase Rapidly

As of mid-September 1998, posted county prices for corn, soybeans, oats, and barley were below loan rates in all producing regions. In addition, PCP's for all wheat classes (except durum), grain sorghum, and oil-type sunflowerseed were below county loan rates in most producing counties.

Sinking wheat prices have forced a groundswell of farmer participation in the government's loan deficiency payment and loan programs. Almost 1.2 billion bushels of the 1998 wheat crop were either under loan (230 million bushels placed) or had received an LDP (959 million bushels), together representing nearly half of 1998's estimated production of 2.56 billion bushels. As of mid-September, wheat producers had received about \$250 million under the LDP program for 1998 wheat (compared with a negligible amount in 1997), with an average loan deficiency payment of 26 cents per bushel.

Wheat accounts for the greatest proportion of overall activity so far in 1998 because it is a major crop and is harvested relatively early. For other early-harvested crops, LDP payments through mid-September were \$20.8 million for barley and \$4.1 million for oats. As the fall harvest advances, outlays for the later-harvested crops, particularly corn and soybeans, will grow and likely surpass those for wheat. With fall harvest just underway, corn LDP's totaled \$13.3 million as of mid-September. Sorghum payments were \$3.5 million, and soybean payments totaled \$681,000.

As expected, major winter wheat producing States topped the LDP list for 1998 crops, as of mid-September. Kansas ranked first with \$50 million, followed by Washington with \$23 million. North Dakota, Colorado, Montana, Oklahoma, and Idaho each tallied \$17 million. South Dakota and Texas each totaled \$14 million.

Weighing Policy Options

Revenue earned by farmers in excess of variable costs is used to cover fixed costs, and any amount left over goes toward other economic costs and profit. For farmers to have a shortrun incentive to plant a crop, expected revenue from the crop must at least match their variable costs.

Current loan rate levels cover variable production costs for most producers. For example, about 89 percent of the U.S. wheat crop is produced at variable costs below the loan rate of \$2.58 per bushel. Comparable numbers are 94 percent for corn (loan rate is \$1.89) and 97 percent for soybeans (loan rate is \$5.26). However, farmers with variable costs above the loan rate—or those with high fixed costs such as high debt service—are

Production cost estimates are from Economic Research Service analysis of data from the Farm Costs and Returns and the Agricultural Resource Management surveys—soybeans for 1990; wheat, 1994; and corn, 1996.

clearly undergoing financial stress. The question for policymakers is whether or not the level of income support provided by the current policy tools is sufficient. A number of legislative options are currently under consideration.

Barring an unexpected runup in prices, planting incentives for many 1999 crops (including wheat, corn, and soybeans) will be sharply lower than in recent years in both the U.S. and abroad. If farmers act on these market signals, they may pull back on plantings of those crops, reducing total crop acreage or possibly shifting some land to more profitable competing crops. This could reduce production prospects next year for those crops with currently low prices and lead to a price upturn in the next season.

As policymakers consider options for addressing the impact of low prices, they will be weighing the impacts of these measures on the workings of supply and demand in the marketplace.

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In the next *Agricultural Outlook* . . .
Market Outlook for Rice and Corn

Food & Marketing



Rise in Food Prices in 1998 & 1999 To Be Lowest Since Early 1990's

Large supplies of meats and a low general inflation rate in 1998 are benefiting and will likely continue to benefit consumers. With 8 months of Consumer Price Index (CPI) data already collected in 1998, the annual average food CPI is 2.1 percent above the first 8 months of 1997. Food prices are forecast to increase only 2 percent in 1998 and 2-2.5 percent in 1999. Such modest increases have not been seen since 1992 and 1993, when food prices increased only 1.2 and 2.2 percent. The general inflation rate for the all-items CPI is forecast to be only 1.7 percent in 1998 and 2.5-3 percent in 1999.

The sluggish export market for higher-price meat products and an end to El Niño's influence on fruit and vegetable prices have also contributed to lower-than-expected retail prices in 1998. Fruits and vegetables, which account for about 15 percent of the at-home component of the food CPI, are expected to increase 4-5 percent in 1998 due to weather-related fresh vegetable price increases, but this increase is lower than originally anticipated because of an earlier-than-expected end to El Niño-related weather patterns.

In the overall food CPI for 1998, fruit and vegetable price increases are miti-

gated by smaller increases and even decreases in other food categories. Cereals and bakery products, 16 percent of the at-home index, are forecast to increase 2 percent. Nonalcoholic beverages, 11.2 percent of the at-home index, are forecast to fall 0.7 percent in 1998 due to the larger coffee crop. Beef, pork, and poultry prices, which account for 19 percent of the food-at-home index, are forecast to fall about 2 percent.

Food accounts for 15 percent of the all-items CPI, and is among the most volatile of the consumer goods tracked by the Federal Government. Retail food price changes are underpinned by general economic factors and the relative shares of farm and marketing costs. In recent years, food price increases have been small because of the low general inflation rate; the larger share of the food dollar going to away-from-home purchases of food and the continued decline in the farm value share of the retail price for most food items—both of which increase the share of food costs, like wages, transportation, and marketing, that are most influenced by the general economy; and increasing economies of size in the farm sector.

The CPI for food measures both food purchased for preparation at home (at-home

component) and purchases of food that is prepared away from home, usually at restaurants or fast-food establishments (away-from-home component). The at-home component of the CPI, which increased 2.6 percent in 1997, is forecast to increase as little as 1.5 percent in 1998 and only an additional 1-2 percent in 1999. The away-from-home component of the CPI, which increased 2.8 percent in 1997, is forecast to increase 2.6 percent in 1998.

Because the away-from-home component includes the costs of food preparation as well as the food items themselves, wages and other business expenses play a larger role in away-from-home prices. Higher wage costs in early 1998, influenced by a tighter than usual labor market, may have caused the away-from-home component to increase more than the 2.6 percent expected based on its steady climb since the minimum wage increases in 1996 and 1997. However, away-from-home food prices were held down by lower raw material and food costs, by competition among restaurants and fast-food establishments, and by Home Meal Replacement (fully or partially prepared foods) or meal solutions offered by supermarkets. In 1999, the away-from-home CPI is expected to increase at about the same rate, between 2.5 and 3 percent.

The smaller increases expected for the at-home food CPI in 1998 and 1999—less than 2 percent—are influenced primarily by agricultural factors rather than by the performance of the general economy. Large supplies of meats and a sluggish export market for higher-price meat products is dampening meat prices; adequate supplies are keeping the prices of fresh fruits and vegetables down; increased sugar production is slowing price growth for sugar and sweets; lower grain prices are affecting the prices of cereals and bakery products; and near-record Brazilian coffee production and strong competition in the soft drink and prepared food industries are keeping down prices for nonalcoholic beverages.

Meats. Total U.S. meat production is expected to increase about 1.5 percent in 1998, following a 2.7-percent increase in 1997. Production is also forecast up slightly again in 1999. Large meat supplies—combined with currency devalua-

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tions around the world, the changing composition of the meat trade, and the need to find alternatives to sagging Asian markets—are challenging U.S. meat exports in global markets, and in some cases, making the U.S. a more attractive market for foreign exporters. Meanwhile, the large supplies and reduced prospects for exports of higher-price meat products in 1998 and 1999 are exerting downward pressure on U.S. livestock and poultry prices.

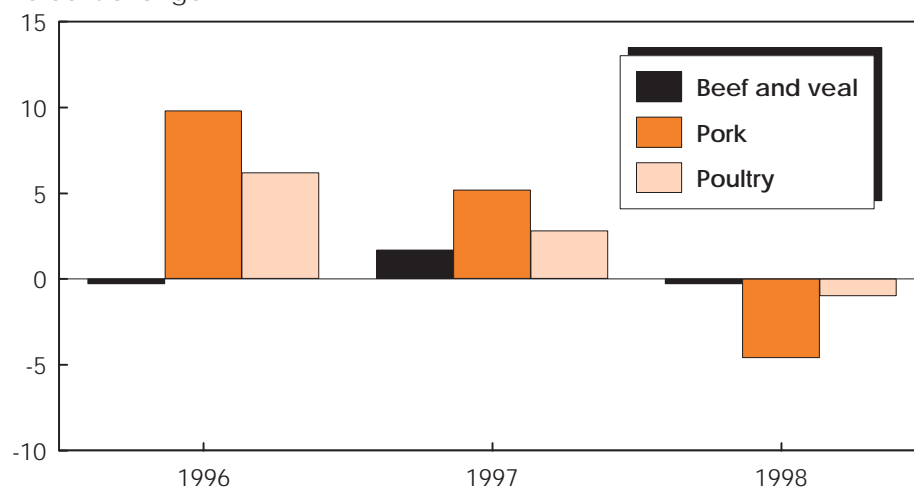
Beef and veal. Large supplies of competing meat should hold prices steady in 1998, following a 1.7-percent increase in the beef CPI in 1997. After a forecast record beef production of 25.8 billion pounds in 1998, beef production is expected to drop about 7 percent in 1999. Reduced beef production in 1999, reflecting the sharply reduced cattle inventory, will result in higher retail beef prices. The CPI for beef and veal is expected to increase close to 3 percent in 1999, as large supplies of pork and poultry hold down a larger beef and veal price increase.

The retail beef market has grown increasingly competitive as efforts by chicken and pork producers to provide larger cut sizes, improved palatability, convenient packaging, and consistency of product for both white-meat chicken and pork loins make it difficult for beef producers to raise prices. Still, per capita beef consumption on a retail weight basis will be 68 pounds this year, up from 67 pounds last year and the largest since 1989. However, consumption is expected to drop to 63 pounds per capita in 1999, while expected per capita consumption of other meats will reach 150 pounds, another 2-percent gain in share of the meat market.

Pork. Commercial pork production is expected to be about 18.8 billion pounds in 1998, up 9 percent from a year earlier. With plentiful supplies of pork and competing meats throughout 1998, pork retail prices are expected to fall almost 5 percent in 1998, following a 5.2-percent rise in 1997. Although competing beef production is expected to drop sharply next year, continued large supplies of pork and poultry will likely moderate the decline to 2-3 percent in 1999.

Pork To Lead Retail Meat Price Declines in 1998

Percent change



1998 forecast.

Economic Research Service, USDA

With abundant pork and reduced beef supplies, retailers will likely favor pork over beef for featuring at supermarkets. U.S. per capita pork consumption on a retail-weight basis may reach 52 pounds in 1998, with a record 54 pounds forecast for 1999. Large U.S. pork supplies and lower wholesale prices also boosted 1998 and 1999 export forecasts. The U.S. is expected to export 1.25 billion pounds of pork in 1998, an increase of 19 percent over the previous year. The forecast for 1999 is 1.3 billion pounds. The composition of exports, however, is shifting to lower-valued products.

Poultry. The CPI for poultry may fall up to 1 percent in 1998 and fall slightly or show no change in 1999, following an increase of 2.8 percent in 1997. Broiler production is expected to increase 2 percent in 1998, following a 3.5-percent increase in 1997. Production is forecast to increase 5 percent in 1999, to 28.9 billion pounds. Turkey production is expected to decline in 1999 after 3 years of negative returns for turkey producers, with some turkey production facilities converting to chicken production.

Broiler producers are expected to remain cautious when making production decisions, as there will continue to be very large domestic meat supplies and uncertainty in the export market. U.S. poultry exports to Hong Kong are forecast to rebound in 1999 from the reduced levels

of 1998, but they will likely remain below 1997. Poultry producers will face strong competition from U.S. pork exports—pork and poultry exports compete as a prime ingredient in processed products and sausage—and from foreign poultry producers.

Poultry is a cheaper source of meat protein than beef, and growth in poultry consumption has been especially strong in China, Russia, and Mexico in recent years. Even in a developed market such as the U.S., consumers are buying more poultry. Lower prices relative to red meats, the convenience of processed poultry products, and promotions of poultry products in the fast-food industry have all contributed to this trend. The fast food market has been an area of growth for U.S. poultry producers, especially for wings and skinless, boneless breast meat. Per capita broiler consumption on a retail basis will be 72.5 pounds in 1998 and could reach 76 pounds in 1999.

Other meats. The price movements of the highly processed meat items (hot dogs, bologna, sausages) and lamb/mutton that make up this category are influenced by the general inflation rate as well as the cost of the meat inputs. Given lower meat prices and low general inflation, retail prices of these products are expected to show no change in 1998, after a 2.8-percent increase in 1997. Price increases for

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beef products and a higher expected inflation rate in 1999 should lead to an increase of 2-3 percent in the prices of these products in 1999.

Fish and seafood. Over the last decade, U.S. per capita seafood consumption has remained relatively flat, at around 15 pounds, roughly 2 to 3 pounds less than turkey consumption. During this time, the source of supply has begun to shift away from wild harvest toward aquaculture (*AO* May 1998). Larger imports of shrimp, tilapia, and salmon, along with slower growth in U.S. catfish output, should lead to an increase of 2.8 percent in the fish and seafood retail price index for 1998. In 1999, the fish and seafood CPI is forecast up 3-4 percent.

Eggs. Retail egg prices have fallen this year due to a nearly 3-percent increase in production in 1998. During the summer months, a heat-related increase in production of medium eggs and a resulting temporary shortage of large eggs did not induce any significant retail price increases.

Egg production is expected to continue increasing in 1999, but at a slower rate of 2 percent. The CPI for eggs is expected to be down 3.3 percent in 1998, with another price decrease of 2 percent in 1999. Per capita egg consumption is forecast at 242.9 eggs in 1998 and 244.5 eggs in 1999. Egg exports are expected to reach 243 million dozen in 1999, up 3 percent from 1998's forecast of 232 million dozen. Higher projected shipments to Canada and rebounding exports to Hong Kong are expected to provide most of the increase.

Dairy products. Milk production rose only about 1 percent in the first half of 1998, hampered by poor-quality hay and alfalfa conditions. Declines in milk cow numbers, however, were mitigated by a continued increase in milk per cow. Strong demand for milkfat products such as cheese and ice cream led to higher consumer prices during the spring and summer and an expected 3.5-percent increase for the dairy products CPI in 1998. With milk production forecast to increase 2-3 percent next year, retail prices for dairy products are expected to increase less in 1999, from 0 to 2 percent.

Changes in Food Price Indicators 1997 through 1999

Items	Relative weights ¹		1997	Forecast 1998	Forecast 1999
	—Percent—		—Percent change—		
All items			2.3	1.7	2.5 to 3
All food	100.0		2.6	2.0	2 to 2.5
Food away from home	37.1		2.8	2.6	2.5 to 3
Food at home	62.9	100.0	2.5	1.5	1 to 2
Meats	10.9	17.3	3.0	-2.0	1 to 3
Beef and veal	4.8	7.7	1.7	-0.6	2 to 3
Pork	3.8	6.1	5.2	-4.6	-3 to -2
Other meats	2.2	3.5	2.8	-0.8	2 to 3
Poultry	3.2	5.1	2.8	-0.8	-1 to 1
Fish and seafood	2.2	3.5	2.3	2.8	3 to 4
Eggs	0.8	1.3	-1.5	-3.3	-2 to 0
Dairy products	6.8	10.8	2.4	3.5	0 to 2
Fats and oils	1.9	3.0	0.9	2.6	3 to 4
Fruits and vegetables	9.1	14.5	2.0	4.7	2 to 4
Fresh fruits and vegetables	7.0	11.1	1.7	4.9	2 to 4
Fresh fruits	3.6	5.7	0.8	2.8	2 to 4
Fresh vegetables	3.4	5.4	2.9	8.0	0 to 2
Processed fruits and vegetables	2.1	3.4	2.4	3.8	2 to 4
Sugar and sweets	2.5	3.9	2.9	1.6	1 to 3
Cereals and bakery products	10.0	15.9	2.1	2.0	2 to 4
Nonalcoholic beverages	7.0	11.2	3.7	-0.7	-2 to 0
Other foods	8.5	13.5	3.2	2.8	2 to 4

¹First column: Bureau of Labor Statistics estimated weights as share of all food, December 1997. Second column: weights as share of food at home, December 1997.

Sources: Historical data, Bureau of Labor Statistics; forecasts, Economic Research Service.

Economic Research Service, USDA

Fats and oils. The December 1997 BLS revision to the CPI item structure (*AO* April 1998) transferred butter from the dairy products category to the fats and oils category. As a result, the volatile movement of butter prices during the summer caused upward pressure on the CPI for fats and oils, which are expected to increase 2.6 percent in 1998, following a modest rise of 0.9 percent in 1997.

Butter and margarine are now combined into one category, comprising 31 percent of the fats and oils index. The other components of the index—vegetable oils, salad dressings, and peanut butter—are highly processed food items. Their price changes are influenced more by movement in the general inflation rate and U.S. and world supplies of oil products than by farm product input costs. The CPI for fats and oils is expected to increase 3-4 percent in 1999, reflecting expectations for the general inflation rate.

Fresh fruits. Heavy rains in February and hailstorms in late March and early April affected the 1998 production of stone

fruits, especially plums and nectarines, in California—a major production region for peaches, plums, and nectarines. Additionally, a 3-day freeze in South Carolina and Georgia during the second week of March brought significant bloom damage to early peach varieties in these key producing States. Smaller peach shipments from the Southeast, coupled with delay in all stone fruit development in California, pushed up retail prices during the early part of the stone fruit season.

However, 1998 fall apple supplies are likely to be up and should keep the increase in the 1998 fruit CPI to 2.8 percent. Weather has been favorable for the Western and Central U.S., particularly in Washington, which produces about half of the Nation's apples, and in Michigan, the largest apple-producing State in the Central region. Apples account for almost 19 percent of the fresh fruit index.

In addition, citrus fruit acreage has expanded as replantings in Florida following the late-1980's freezes have begun to bear fruit. These trees, including oranges

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and grapefruit, will produce increasingly larger crops into the early 2000's.

California has also expanded its orange production area. California's oranges are mostly for fresh use, while Florida's oranges are mainly used for juice. Citrus fruits comprise over 21 percent of the fresh fruit index. Bananas account for over 19 percent of the fresh fruit index, and supplies are ample in 1998.

U.S. demand for fresh fruit is expected to continue strong and exports are projected to rise. As a result, the fresh fruit index is expected to increase 2-4 percent in 1999, on top of an increase of 2.8 percent in 1998.

Fresh vegetables. Growing conditions were mixed in 1998 as a result of El Niño-related weather patterns. Torrential rains in Florida during the last quarter of 1997; rain and cold in the desert areas of California, Arizona, and Texas; and an unusual December 1997 freeze in west Mexico reduced fresh vegetable supplies and boosted retail prices early in 1998. Prices in the first half of the year were 14.6 percent higher than a year earlier. U.S. growers also reduced harvested area from a year earlier for some fresh-market vegetables and for potatoes as a result of lower grower prices in 1996 and 1997, contributing to shorter supplies and stronger retail prices.

Subsequent plantings of normal acreage and improved weather during the remainder of the year will mitigate much of that early price rise. However, weather-related delayed harvests are expected to lead to higher prices for potatoes, which cannot be replanted, contributing to an increase in the fresh vegetable CPI of 8 percent in 1998. With normal weather and growing conditions in 1999, supplies should become abundant again, leading to a forecast change in the fresh vegetable CPI for 1999 of no more than 2 percent.

Processed fruits and vegetables. Retail prices for processed fruits and vegetables in 1998 and 1999 are largely determined by the previous year's production and resulting supplies. Vegetable production for processing declined 8 percent in 1997,

mostly due to reduced processing tomato output. Contract acreage for the five leading processing vegetables (tomatoes, sweet corn, snap beans, green peas, and cucumbers) was down 3 percent in 1997, but is expected to be up 1 percent in 1998 to 1.4 million acres.

Total supplies of canned vegetables have been down the last 2 years because of lower wholesale prices, which have discouraged processors from increasing contract acres. Although frozen vegetable supplies increased 2 percent in 1997, the resulting larger stocks led to lower wholesale prices for frozen vegetables in the first half of 1998. Although processed vegetable supplies were less in 1998, abundant supplies of processed fruits kept the CPI increase for processed fruits and vegetables to 3.8 percent for 1998. The expected increase for 1999 is 2-4 percent.

Sugar and sweets. Domestic sugar production was up 9 percent in 1997/98 because of acreage increases for sugarbeets. Although U.S. sugar consumption has grown by about 1.9 percent per year since 1985/86 and industrial use of sugar has risen, the increased production, along with a lower general inflation rate, held the 1998 sugar and sweets CPI to a 1.6-percent increase. Continued growth in sugar deliveries to the expanding bakery and breakfast cereal sector should offset or exceed the 1998/99 sugar production increase of 1 percent, leading to a 1999 CPI increase for sugar and sweets of 1-3 percent.

Cereals and bakery products. This food category accounts for a large portion of the at-home food CPI—almost 16 percent. With grain prices lower this year and inflation-related processing costs at low levels, the CPI for cereals and bakery products increased only 2 percent in 1998. Most of the costs—more than 90 percent in most cases—to produce cereal and bakery products are for processing and marketing, making grain and other farm ingredients a minor cost consideration. Competition for market share among the leading breakfast cereal manufacturers led to decreases in the cereal CPI in 1996 and 1997, with a small increase of 1 percent expected in 1998.


While competition among producers and consumer demand for bakery products is expected to continue, the 1999 CPI is forecast to increase 2-4 percent due to higher inflation next year.

Nonalcoholic beverages. Coffee and carbonated beverages are the two major components of this category, accounting for 28 and 38 percent of the nonalcoholic beverage index. Competition in the soft drink industry resulting in lower consumer prices continued throughout 1998, and lower coffee prices during the last half of 1998 are due to a projected near-record coffee crop in Brazil.

The largest producer of Arabica coffee beans, Brazil's annual production has alternated between good and bad years since 1994. Coffee trees have finally recovered from the effects of a freeze in 1994, and the current crop has benefited from excellent weather for growth and maturing of the beans. The current large Brazilian crop is forcing other coffee-producing countries to cut prices, possibly leading to lower U.S. retail prices for coffee next year. In the U.S. market, price and country of origin are important factors for coffee importers, as coffee consumers have shifted toward higher-quality coffee.

With retail coffee prices on the decline and soft drink prices lower throughout this year, the CPI for nonalcoholic beverages should fall slightly in 1998 and remain unchanged in 1999.

Other foods. Items in this category are highly processed and primarily affected by changes in the all-items CPI. These products include soups, frozen dinners, pizzas, snacks, baby food, and precooked frozen meats. Although demand for prepared products continues to increase, competition among these products and from the away-from-home food market should lead to an increase in the CPI for these foods of 2.8 percent in 1998. Continued growth in this category next year would indicate a CPI increase of 2-4 percent in 1999.

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Farm & Rural Communities



Status Report

Hired Farm Labor in U.S. Agriculture

Labor supply remains a persistent issue for farm employers who need large amounts of nonfamily labor during particular periods of the growing season, a need complicated by the unpredictable nature of agricultural production. Hired farmworkers account for about one-third of the production workforce in U.S. agriculture—operators and their unpaid family members account for the remaining two-thirds—and labor costs range from about 4 percent of inputs on livestock operations to 45 percent for horticultural specialty farms.

The match between supply and demand for labor has always been a critical issue in agriculture. When U.S. workers are not available to meet the demand for hired farmwork, employers have traditionally looked to foreign workers for temporary relief. Currently, nonimmigrant foreign workers can be employed temporarily in agriculture under the H-2A provisions of the Immigration and Nationality Act.

Employers must meet requirements to ensure that efforts to recruit domestic labor have been made and that employment of guestworkers will not adversely affect the wages and working conditions of domestic farmworkers in the area—

employers wishing to hire workers under the H-2A program must offer domestic workers a guaranteed minimum wage and period of employment equal to the average wage, housing and transportation benefits, and employment period provided for guestworkers under H-2A requirements.

Both employers and domestic farmworker advocates have found fault with the H-2A program, however. Despite their importance to agriculture, U.S. hired farmworkers as a group experience low wages, seasonal employment, and limited participation in the nonfarm labor market, leading many in the debate to insist there is a surplus of farm labor and that no supplemental labor program is needed. Others insist that shortages frequently do occur at particular times and places, and the current supplemental labor program cannot meet those needs in a timely way.

Legislation has been introduced periodically, most often in conjunction with immigration reform, either to replace the H-2A program with a new guestworker program or to promote better options for matching domestic labor supply with demand. These efforts have increased in the last few years as stepped-up enforcement of immigration laws has led many employers to fear the loss of the current

labor supply in agriculture—estimates of the share of fraudulently documented workers in the total hired farm labor force range from 25 to 75 percent.

USDA's Economic Research Service produces an annual demographic and economic profile of domestic hired farmworkers, which includes immigrant workers not hired as temporary guestworkers. The annual profile tracks trends in the hired farm workforce based on annual averages of data collected by the U.S. Census Bureau in its monthly Current Population Survey (CPS). The information provided by these annual profiles has been useful in informing policy discussions about both farm labor supply and the economic conditions of the hired farm workforce.

Number of Hired Farmworkers Remains Stable in 1997

Hired farmworkers include people 15 years and older who reported their primary occupation during the week of the CPS as farmworkers engaged in planting, cultivating, and harvesting crops or attending to livestock (86 percent); farm managers (8 percent); supervisors of farmworkers (4 percent); and nursery and other workers (2 percent). The annual average number of hired farmworkers employed per week in 1997 remained about the same as the previous year at just under 900,000.

The demographic profile of hired farmworkers has changed little during the 1990's. Hired farmworkers tend to be younger and less educated than the average for all wage and salary workers, and are more likely to be male, Hispanic, and noncitizens.

Demand for hired farmworkers varies by type of crop and livestock, length of growing and harvesting seasons, extent of mechanization, and scale of production. As a result, the number of hired farmworkers varies significantly by region—ranging from 370,000 in the West (41 percent of all hired farmworkers) to 57,000 in the Northeast (6 percent of all hired farmworkers). Livestock production predominates as the source of employment for hired farmworkers in the Midwest, whereas crop production—typically fruit,

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vegetable, and horticultural crops—predominates in the West.

The demographic characteristics of hired farmworkers also vary by region. The proportion of women in the hired farm labor force is greater in the Northeast than in other regions. Hispanics are only 3 percent of the hired farm workforce in the Midwest, compared with 17 percent in the Northeast, 35 percent in the South, and 67 percent in the West.

Hired Farmworker Earnings Remain Low

Hired farmworkers continued to earn significantly less than most other workers, influenced by their relatively low skill level. Full-time hired farmworkers received median weekly earnings of \$277 in 1997, 55 percent of the \$500 median weekly earnings for full-time wage and salary workers economywide. Only private household workers, at \$206, received lower median weekly earnings than hired farmworkers. Real median weekly earnings for full-time farmworkers have declined 6 percent since 1990, compared with a 1-percent increase from 1990 to 1997 for all wage and salary workers.

The number of employed farmworkers varies widely by season—from 589,000 during the survey week in January 1997 to 1,117,000 in July. The seasonality of farm employment, low weekly earnings, and limited access to additional nonfarm work combine to make hired farmwork one of the lowest paid occupational groups.

Not only is income from farmwork limited, but family income of hired farmworkers from all sources (including jobs; businesses, farms, or rents; pensions, dividends, interest, and social security payments; and any other money income received by family members 15 years or older) falls significantly below that of all wage and salary workers. More than 70 percent of hired farmworker families had annual income below \$30,000 in 1997, with 23 percent below \$10,000. In contrast, only 38 percent of all wage and salary workers had family income below \$30,000, with 15 percent below \$10,000.

Using the Current Population Survey To Profile Hired Farmworkers

For its annual profile of hired farm labor, USDA's Economic Research Service (ERS) uses the Bureau of Census' Current Population Survey for several reasons. The data provide information on the total number of hired workers in agriculture, rather than a single sector of the industry. They also provide data on both demographic and earnings characteristics of hired farmworkers, because they survey individual workers rather than employers. And they allow for direct comparisons between the hired farm workforce and all wage and salary workers, since the CPS collects data on a representative sample of the entire U.S. population living in civilian, noninstitutional households.

The CPS has several limitations as a source of data on the hired farm workforce. The survey classifies employed persons according to the job at which they worked the greatest number of hours during the survey week. As a result, hired farmworkers who spent more time during the survey week at their nonfarm job than at their farm job would not be included in the primary employment count as hired farmworkers. They would be counted instead as having hired farmwork as their secondary employment.

The CPS may also undercount Hispanics in the hired farm workforce. Because the CPS is based on a survey of households, it may undercount farmworkers not living in traditional types of housing, many of whom are likely to be Hispanic. In addition, undocumented or fraudulently documented foreign farmworkers may, because of their illegal status, avoid survey enumerators.

Characteristics of Hired Farmworkers Vary by Type of Farmwork Performed

Characteristics	All	Crop production	Livestock production	Other*
<i>Percent</i>				
Gender:				
Male	83.3	84.6	84.8	69.8
Female	16.7	15.4	15.2	30.2
Race/ethnicity:				
White	52.4	37.6	71.4	42.5
Hispanic	41.0	53.2	24.6	53.0
Black and other	6.6	9.2	4.0	4.6
Schooling:				
Less than 5 years	12.2	17.4	5.0	18.1
5-11 years	46.9	49.3	44.2	46.6
12 years or more	40.9	33.3	50.8	35.3
U.S. citizenship	67.1	56.2	81.2	60.5
Median age (<i>years</i>)	33	35	29	32
Median weekly earnings (<i>dollars</i>)	277	277	280	268

Calculated from 1997 Current Population Survey earnings microdata file.

*Includes agricultural services, forestry, fishing, hunting, trapping, landscape and horticultural services, and other agriculture-related establishments.

Economic Research Service, USDA

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Access to Nonfarm Jobs Limited For Crop Production Workers

Many hired farmworkers seek nonfarm jobs to supplement their incomes. However, their low education and skill levels often limit their ability to compete for higher wage, nonfarm jobs. Annual averages derived from the CPS cannot capture information about the number of farmworkers who combine farm and nonfarm work within a year. Using data from a survey conducted by the Department of Labor, the National Agricultural Workers Survey (NAWS), however, can provide some information on such efforts by crop production workers to supplement seasonal farm income.

The Department of Labor conducts the NAWS three times each year, gathering data on the demographic and earnings characteristics of a sample of workers employed in seasonal agricultural services, primarily crop production. Hired farm workers employed in the livestock industry are not included in this survey. (Readers should note that the NAWS survey sample is entirely different from that of the CPS, so data from the two surveys are not statistically comparable.)

During 1994-95, NAWS found that about one-fourth of crop production workers also did nonfarm work. Workers born in the U.S. were much more likely to hold nonfarm jobs than were foreign-born workers (41 percent and 19 percent), and younger workers, ages 18-35, were somewhat more likely to do nonfarm work than workers 35 years and older (29 percent and 21 percent). Opportunities for nonfarm work appeared to be more plentiful in the Midwest and Western Plains, where 43 percent of the sample held nonfarm jobs during the year. Much smaller proportions of farmworkers held such jobs in other regions (Southeast, 24 percent; Northwest, 20 percent; Northeast, 16 percent; and West, 8 percent).

Nonimmigrant Guestworkers Supplement U.S. Labor

In addition to nearly 900,000 U.S. farmworkers, employers have begun hiring increasing numbers of temporary foreign farmworkers through the H-2A program. In 1997, 23,352 jobs were certified for temporary foreign guestworkers—i.e., the Department of Labor determined no domestic workers were available to fill them—up from 17,557 in 1996 and 12,173 in 1994.

H-2A workers are predominantly used in tobacco and apple production—62 percent of 1997 certifications were for tobacco and 18 percent for apples. Other work for which relatively large numbers of jobs were certified included sheepherding (7 percent), custom combining (3 percent), fruits and vegetables (2 percent), and irrigation (1 percent). Other uses (6 percent) included nursery/horticulture, sugarcane, beekeeping, and machine operators.

Nine States (North Carolina, Virginia, Kentucky, New York, Connecticut, Massachusetts, Tennessee, Idaho, and Texas) accounted for 80 percent of guest-

worker certifications. North Carolina led in 1997 with over 6,000 jobs certified, mostly for work in tobacco and vegetables. Virginia followed with over 3,000 certifications, nearly all for tobacco and apples. Kentucky and New York each had more than 2,000 jobs certified—for tobacco in Kentucky and apples in New York. Connecticut and Massachusetts, each with about 1,000 certifications, also requested workers primarily for tobacco and apples. Texas and Idaho each received certifications for about 500 workers, primarily for jobs in custom combining and sheepherding, respectively.

Despite recent increases in the use of H-2A workers, farm employers contend that the program is too cumbersome to provide needed workers in a timely manner. U.S. farmworkers and their advocates counter that the program is not needed at all, given that repeated investigations of domestic farm labor supply have found no shortage of workers available for farm work. They contend that improved wages and working conditions would attract an adequate supply of those workers when and where needed. Employers respond that many of those available workers are fraudulently documented, leaving their

employers vulnerable to a sudden loss of workers through Immigration and Naturalization Service (INS) enforcement activities.

Efforts supported by farm employers to reform or replace the H-2A program during consideration of the 1996 Immigration Reform and Control Act were unsuccessful, but a provision of the legislation directed the General Accounting Office (GAO) to examine the operations of the H-2A program and report their findings and recommendations to Congress.

In a December 1997 report, GAO found INS enforcement efforts unlikely to significantly reduce the number of unauthorized farmworkers, thus there appeared no likelihood of a widespread shortage of farmworkers. The report acknowledged that there might continue to be local shortages in specific crop areas. GAO concluded that the current H-2A program was sufficient to respond to such shortages.

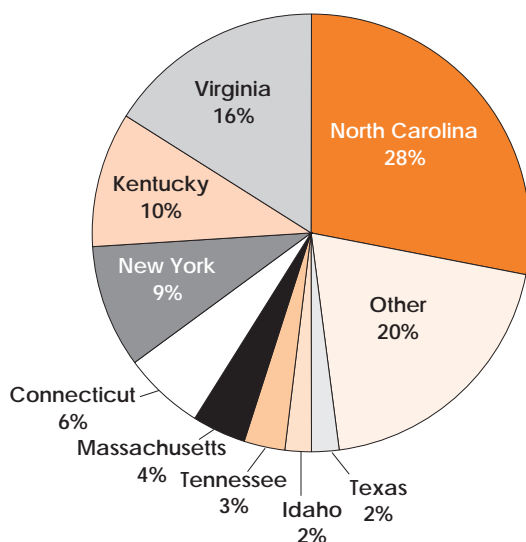
GAO's evaluation of the H-2A process, however, suggested that processing delays and late applications interfered with the ability of farm employers to fill certified jobs with foreign workers. But GAO recommended improvements to the efficiency of the program—streamlining and better monitoring the application process—rather than replacement. Further recommendations were for new Department of Labor authorities to require wage guarantees and to enforce labor standards and contracts.

In their responses to GAO's report, both USDA and the Department of Labor agreed that there was no national farm labor shortage at this time and that the H-2A program, with some procedural changes, was adequate. USDA emphasized the localized shortages and the difficulty of matching qualified domestic farm laborers with jobs at the times and in the places they are needed, as well as procedural problems with the H-2A program that make it cumbersome for growers, particularly the long lead time (60 days) required for certifying jobs.

The Department of Labor, conversely, emphasized its interpretation that farm labor was actually in surplus, not shortage, based on such evidence as high unemployment in agricultural areas and

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Nine States Accounted for 80 Percent of H-2A Worker Certifications in 1997



Source: U.S. Department of Labor.
Economic Research Service, USDA

persistent underemployment of farmworkers, as well as on the anticipated effects of new work requirements under welfare reform. Labor also agreed with GAO's assessment that INS enforcement efforts were unlikely to cause significant reductions in farm labor supply, regionally or nationally.

USDA expressed opposition to accepting a farm labor policy based on availability of an illegal labor force and noted that the original intent of the H-2A program had been to provide for a legal method of supplementing the U.S. farm labor supply with foreign workers whenever short-term, local shortages occurred. USDA pointed out that the H-2A program included safeguards to protect jobs, wages, and working conditions of domestic workers, whereas acceptance of undocumented and fraudulently documented workers in the farm labor force allowed uncontrolled competition from foreign labor that could keep wages low and working conditions poor.

Reform of H-2A Program Pending

Many farm employers remain dissatisfied with the current temporary guestworker program, despite the GAO findings. A number of bills to redesign the temporary

nonimmigrant worker program for agriculture have been proposed in Congress during the current session. The U.S. Senate passed one of these (S. 2337), which would reform the current H-2A program, as an amendment to the Commerce, Justice, and State Departments Appropriations Act in July.

The new legislation, still to be considered by the House, proposes the creation of a voluntary national registry, maintained by the Department of Labor, through which available, eligible farmworkers and employers seeking to hire farm labor would be matched. Use of this job registry would replace the current employer recruitment requirements of the H-2A program. If the register could not provide the number of workers required, the employer would be entitled to receive visas for temporary foreign workers.

The legislation also would reduce the lead time for growers to request workers from 60 days to 21 days, and allow them to request visas for foreign workers only 7 days before they are needed. Changes are also proposed in the method for determining the minimum wage rate (involving greater participation by State employment services and employers), and in employer requirements for housing workers (allowing employers to provide vouchers to pay

for rental housing, rather than providing housing on site).

Supporters of the legislation maintain the job registry would offer U.S. farmworkers first access to H-2A jobs, and that other changes would bring the program more in line with prevailing local and regional farm employment conditions. Farmworkers and their advocates generally oppose the changes in the H-2A program. They believe the proposals in the new legislation would lead to the hiring of large numbers of seasonal guestworkers by reducing both domestic labor recruitment requirements and the costs of hiring H-2A workers.

The use of foreign labor in U.S. agriculture has been a perennial source of debate, beginning with the advent of large commercial agriculture operations in the last century. Farm employers want access to a supply of skilled labor available in the numbers and at the times needed with relatively short notice. They compete in a global marketplace that rewards low-cost producers and puts downward pressure on the wages and benefits they can provide.

Farmworkers and their advocates counter that without easy access to guestworker programs, farm employers would be forced to implement labor management strategies to train and retain skilled workers who would be available for employment when and where needed. They contend increased wages and improved working conditions could be easily absorbed into retail prices for farm products, since costs at the farm gate are such a small component of food prices.

Historically, Federal programs like the H-2A program have attempted to bridge the gap by offering a legal means for securing temporary foreign workers when needed while making an effort to ensure domestic workers do not lose jobs, wages, and benefits through competition with nonimmigrant workers. But opposing positions on the issue present little opportunity for consensus or compromise. Responses to the legislation currently under consideration suggest that this debate will not end soon.

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Resources & Environment



The Clean Water Action Plan: Implications for Agriculture

An ambitious Federal proposal for improving and protecting water quality could affect the way farmers manage their land in many parts of the country. The Clean Water Action Plan, a guidepost for future national water quality policy, involves a fundamental shift in policy to emphasize control of nonpoint sources of pollution.

A basic premise of the Clean Water Action Plan (CWAP) is that, while existing approaches to water quality protection have resulted in many successes, they are inadequate for achieving the goals of fishable and swimmable water for all Americans. The plan proposes a change in the direction of water quality policy to focus on watersheds that are water-quality-impaired, and a coordinated effort to address both point and nonpoint sources of pollution. These sources include agriculture.

The centerpiece of U.S. water quality policy has been the Clean Water Act (CWA), originally passed in 1972 with several subsequent reauthorizations. While the CWA has resulted in a great number of successes, many water quality problems remain. Instead of looking for needed changes in water quality policies through a reauthorization of the CWA, the Administration decided to develop

new initiatives within the context of existing laws and programs for more complete water quality protection.

In October 1997, Vice President Gore instructed the U.S. Environmental Protection Agency (EPA) and USDA to develop a strategy for fulfilling the original CWA goal of fishable and swimmable waters for all Americans. After 4 months of work, and with assistance from other Federal agencies, the Clean Water Action Plan (CWAP) was issued and put into action.

The CWAP recognizes the accomplishments since passage of the CWA in 1972, and considers what has worked well, what can be improved, and what remains to be done. Because agriculture has been identified as a major contributor of many remaining water quality problems, any attempts to further improve national water quality will involve agriculture.

The CWAP addresses three major goals:

- enhanced protection from public health threats posed by water pollution,
- more effective control of polluted runoff, and
- promotion of water quality protection on a watershed basis.

The first goal has been an important consideration in past water quality programs, but more can be done to protect people from pathogens and toxic materials. The latter two goals, which have been less prominent in past programs, are vital for achieving further water quality improvements in a cost-effective manner. The initiatives proposed to address these goals cover the complete range of water quality issues, including improved water quality monitoring and reporting, improvements in the way industries are monitored, new approaches for protecting water resources and wetlands, improved stewardship of both public and private lands, and involvement of local citizens and other stakeholders.

An Overview of U.S. Water Policy

Some background on U.S. water quality policy may clarify the rationale for the Clean Water Action Plan. The 1972 Clean Water Act (along with reauthorizations in 1977, 1982, and 1987) established goals of fishable and swimmable water for all rivers, lakes, and streams, and put in place a regulatory structure for controlling discharges from factories, sewage treatment plants, and other "point" sources of water pollution.

Point-source pollution enters water bodies through pipes or other discrete conveyances. Such pollution is easy to observe and to measure, making regulatory approaches for control relatively easy to implement.

But point-source pollution is not the only kind. Nonpoint-source pollution enters water diffusely in the runoff or leachate from rain or melting snow, and is often a function of land use. Examples of nonpoint-source pollution include runoff from cropland, feedlots, forests, pastures, and city streets, and atmospheric deposition. Nonpoint-source pollution is very difficult and often too costly to observe and to measure and therefore much more difficult to control.

Under the CWA, the States took the lead in controlling nonpoint-source pollution, and the law did not specify the means of controlling it. States have implemented nonpoint-source pollution programs that

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are largely voluntary, relying on landowners to implement practices that reduce water pollution. States sometimes provide landowners with financial assistance for implementing alternative management practices, and commonly depend on technical assistance from conservation districts and from USDA's Natural Resources Conservation Service

The different approaches for dealing with point sources (federally based regulations) and nonpoint sources (locally based, largely voluntary) have led to improvements in some aspects of water quality, but not in others. Many problems resulting from point-source pollution have been addressed, particularly around urban areas.

No longer are there news stories of the Cuyahoga River catching fire, or of Lake Erie being biologically dead. Instead there are reports of increasing recreational use of major rivers such as the Potomac, Delaware, and Hudson, even near major urban areas. While the number of people served by municipal sewage treatment plants has more than doubled since 1972, discharge standards have reduced the discharge of toxic materials by billions of pounds per year. Today, 60 to 70 percent of assessed waters meet State water quality goals (measured by miles for rivers, and by area for lakes and estuaries).

However, water quality problems remain, most attributed to pollution from nonpoint sources. According to the most recent EPA Water Quality Inventory, 36 percent of surveyed rivers, 39 percent of surveyed lakes, and 38 percent of surveyed estuaries are impaired for one or more uses. About half of the Nation's 2,000 watersheds are in need of restoration or protection. Recent, well-publicized incidents include microbe-related fish kills in nutrient-enriched waters; the closing of shellfish beds due to bacterial contamination; the presence of pesticides in drinking water; degradation by nutrients of national resources such as the Gulf of Mexico, Chesapeake Bay, and the Everglades; and the deaths of more than 100 people in Milwaukee when the city's water supply became contaminated with the microorganism *Cryptosporidium*.

Nationally, agriculture is believed to be a source of the pollutants in 70 percent of

impaired river and stream miles, and 49 percent of impaired lake acres. A U.S. Geological Survey (USGS) study of agricultural land in watersheds with poor water quality estimated that, in the watersheds where 71 percent of U.S. cropland (nearly 300 million acres) is located, concentrations of at least one of four common surface-water contaminants (nitrate, phosphorus, fecal coliform bacteria, and suspended sediment) are above instream criteria for supporting water-based recreation activities.

Well-water sampling by EPA and USGS found widespread evidence of pesticides and nitrogen from agriculture entering groundwater resources, possibly threatening water supplies in some areas. Comprehensive estimates of damages from agricultural pollution are lacking, but soil erosion alone is estimated to cost water users \$2-\$8 billion annually.

The Role of Agriculture

The CWAP lays out 10 principles to guide clean water protection efforts:

- strong standards for clean water
- stronger efforts to protect human health
- watershed management as the basis for water quality policy
- restoration of watersheds not meeting CWA goals
- links between water quality and natural resource programs
- response to growth pressures on sensitive coastal waters
- prevention of polluted runoff
- stewardship of Federal lands and resources
- improvement of water information for citizens
- ensuring compliance, and fair protection of all citizens.

The principles are to be carried out through 111 key action items that represent the issues to be addressed by Federal agencies over the next year. To the extent that they are carried out, these principles have important implications for agriculture.

Among the 10 CWAP principles, those with particular importance for agriculture are watershed management, setting strong standards for cleaner water, preventing polluted runoff, and improving citizen awareness and involvement by providing information on water quality. The principle of watershed management presupposes the other three.

Watershed management is important because the effects of water pollution are generally felt within the watershed in which pollutants originate. The management process begins by determining and setting appropriate water quality standards or goals for the region. Water quality standards (numeric, instream limits on pollutants) have been important tools for guiding policies aimed at point sources. However, standards for agricultural pollutants such as nitrogen and phosphorous have never been set. The CWAP proposes the use of water quality standards for nitrogen and phosphorous to protect human and ecological health. Such standards provide a means for identifying watersheds that are in need of protection, as well as the level of improvement required to achieve water quality goals.

Watershed management will likely foster the identification of water bodies most affected by pollution, and the sources of those pollutants within the watershed. Sources that can be controlled at least cost can then be addressed first.

The CWAP principle of preventing polluted runoff focuses on the most important source of remaining water quality problems in the U.S. Given the extent to which point-source discharges have been reduced over the past 25 years, it would be difficult and costly to further improve water quality in impaired watersheds solely by imposing tighter controls on point sources. Research suggests that further water quality improvements can be achieved at least cost by focusing efforts on controlling polluted runoff, since nonpoint sources of pollution have not been strongly controlled in the past. Agriculture is likely to be a primary focus in many watersheds with impaired waters because it is a major source of polluted runoff and remaining water quality problems.

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Nutrient runoff results from both crop and livestock production. The CWAP places particular emphasis on the management of animal waste. Recent trends in the livestock industry have resulted in larger, more concentrated operations. The huge amount of animal waste generated by these facilities has raised concerns at the local level over environmental quality and health. Problems arise when waste is improperly handled at the site, or when it is spread on land at rates that exceed agronomic standards. Improper management can result in risk of ecological damage to streams and threats to human health.

Public concerns about animal waste have prompted some States to focus efforts on reducing environmental threats from animal feeding operations (AFO's). On the Federal level, the CWAP includes two items that address these concerns. Under the first, EPA will use current regulatory authority to address standards and permits for the larger animal operations. The second calls for EPA and USDA to develop a unified national strategy to minimize the environmental risk and public health impacts of AFO's.

On September 21, the draft unified strategy was published in the *Federal Register* to solicit public comment for a period of 120 days. The draft strategy covers voluntary programs under USDA as well as regulatory efforts by EPA through State agencies for larger operations.

The CWAP is not specific as to how runoff from crop production will be addressed; however, improved management of both commercial fertilizer and animal waste applied to cropland may become a major program goal in many areas. Nutrient management can be encouraged through a variety of means, including education, financial incentives, and regulation. The approach that provides the most cost-effective level of control depends on the presence of other sources of nutrients (including point sources) as well as the characteristics of agriculture (e.g., crops grown, soil resource base) and of farmers (e.g., income, management skills). If EPA and the States believe that regulatory policies are necessary, controls will have to be carefully designed and based on factors

that are easily observable, such as input use or management practices.

Cost-effective control of runoff on a watershed basis requires coordination between programs and policies offered by all levels of government. Existing water pollution control programs are not well coordinated. Currently, these programs exist at the Federal, State, and local levels and include the point-source permit program under the Clean Water Act, the individual State nonpoint-source management programs developed under the Clean Water Act, coastal zone nonpoint-source programs under the Coastal Zone Management Act, and separate State programs to deal with unique local problems.

In addition, USDA and State departments of agriculture currently provide financial, technical, and educational assistance for nonpoint-source pollution control through a variety of conservation programs as resources permit. Examples are USDA's Environmental Quality Incentive Program and the Conservation Reserve Program.


Coordinating and integrating existing programs managed by State and local governments could increase the effectiveness of the programs and reduce administrative costs by pooling resources, ensuring consistency, and eliminating redundancies in authority. The CWAP recognizes a need for enforceable authority as part of a watershed management program to ensure that adequate pollution controls are in place if voluntary efforts are not fully successful.

The Clean Water Action Plan acknowledges USDA's key role in national water quality policy. USDA has considerable experience in working with farmers, and has a long history of working on a watershed basis. Specifically, USDA will play a role in developing watershed protection goals and water quality protection strategies along with EPA.

In addition, USDA will be a major source of education, technical assistance, and financial assistance to landowners developing comprehensive management plans to protect water quality. Current USDA programs such as the Environmental Water Quality Incentive Program, Conservation Reserve Program, Wetland Reserve Program, and Wildlife Habitat Incentive Program can all provide incentives to farmers for addressing water quality concerns. The CWAP proposes increased funding for USDA to support water quality efforts.

Finally, in keeping with the concept of watershed management, the CWAP suggests that citizens take a more active role in water quality protection so that program agencies and responsible parties may react to local concerns. To promote such involvement, the plan calls for improvements in water quality monitoring and reporting of water quality information to keep citizens informed of the quality of the water they drink or come into contact with through recreation. The knowledge that water contains undesirable materials will likely increase citizen demand for additional protection of water quality. Recent actions to reduce the impacts of animal waste are a reflection of effectively communicated grassroots concerns.

The Clean Water Action Plan portends greater scrutiny of agricultural production practices in the future. While all its components may not be carried out, farm operators can expect to see increased use of financial, technical, and educational assistance, and enforceable mechanisms to reduce polluted runoff in watersheds that are impaired by agricultural pollutants.

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For more news, information, text, and background on the CWAP:

Go to www.nhq.nrcs.usda.gov/cleanwater/ on the Internet.
Click on "What's New" for the draft unified strategy for animal feeding operations.

Special Article

Cuba's Agriculture: Collapse & Economic Reform

Cuba has responded in part to its current economic crisis by beginning to open the economy to market forces and to pursue more open trade with the other countries in the region. From the perspective of land area, population, and agricultural production, Cuba dominates the Caribbean. If Cuba chooses to join the global market economy, its economic influence could significantly increase. If U.S.-Cuba trade opens, Cuba has the potential to become a new source for U.S. agricultural and food imports, a destination for U.S. investment, a major market for U.S. exports as well as a competitor for U.S. producers (particularly those in Florida), and an attraction for U.S. tourists.

Collapse of the Cuban Economy

Cuba's recent economic history can be broken into three periods delineated by two major events: the 1959 communist revolution, and the collapse of the centrally planned economies of Eastern Europe in 1989 and of the Soviet Union in 1991.

In the pre-revolutionary period, Cuban resources were concentrated in the hands of a few. Eight percent of the landowners controlled more than 70 percent of the land, and U.S. owners controlled 25 percent of Cuban land. U.S. investments were diversified throughout the economy. In agriculture, many large U.S. companies had investments in sugar, cattle, and tobacco. In this era, the Cuban and U.S. sugar economies were tightly integrated, and over half of Cuban sugar exports went to the U.S., providing over one-third of U.S. sugar imports.

Castro's revolution broke up the concentration of resources and nationalized much of the economy. Relations with the U.S. deteriorated. The U.S. broke off diplomatic relations with Cuba in 1961 and imposed a trade and financial embargo in 1962. The embargo was tightened by the Cuban Democracy Act of 1992 and the Cuban Liberty and Democratic Solidarity Act of 1996 (Helms-Burton). The 1992 legislation penalized other countries if their ships stopped in Cuba. The 1996 Act limited trade by third-country subsidiaries of U.S. companies, allowed the President to impose sanctions on countries trading with Cuba, barred officials of companies doing business with Cuba from entering the U.S., and codified an Executive Order-based embargo into law.

The embargo forced Cuba to rely on the more distant suppliers and markets in Europe and Asia. Since ships engaged in Cuban trade were unable to enter U.S. ports, Cuba was also forced to use high-cost Cuban vessels or pay higher freight charges to cover empty back hauls to non-U.S. ports. All this led to increased import costs. This, in turn, led to higher costs and lower levels of production, high food prices, and chronic food shortages, exacerbated in 1998 by drought.



University of Florida's International Agricultural Trade and Development Center

Also following the revolution, Cuba's economy became heavily dependent on Soviet support. Cuba's sugar-dependent economy relied on Soviet economic assistance and on markets in the USSR and Central and Eastern European countries. The Soviets bartered crude oil and refined products at below-market prices in exchange for Cuban sugar at relatively high price levels (51 cents per pound in 1986 compared with a world market price of 6 cents). Cuban sugar production ranged from 4 to 8 million tons throughout the 1960's, 1970's, and 1980's. Soviet assistance served to offset most of the negative impacts of the U.S. embargo, and accounted for as much as one-fourth of Cuba's national income in some years.

With the 1989 collapse of the centrally planned economies of Eastern Europe and the 1991 dissolution of the Soviet Union, Cuba lost both its major markets and its primary source of foreign assistance. As a result, the Cuban economy collapsed, and the full effect of the U.S. embargo became evident. The loss of cheap Soviet oil also triggered a Cuban energy crisis. Cuban foreign trade fell 75 percent, and economic output fell 50 percent.

By 1994, agricultural production had fallen 54 percent from 1989 levels. Particularly hard hit were sugar and tobacco production. Food consumption fell 36 percent. Daily caloric intake fell from 2,908 calories per day in the 1980's to 1,863 calories per day in 1993. (The USDA-recommended minimum is 2,100-2,300 calories per day.) For those most dependent on state rations—the very old and the very young—consumption fell to 1,450 calories per day.

Government Reforms Begin Economic Recovery

The Cuban Government responded to this economic crisis with a major program of reforms. Initiating market-oriented reforms, allowing foreign investment, and promoting a diversified export program have set the stage for Cuba's economic recovery.

In 1990, Cuba announced a "Special Period in Peacetime" economic austerity program to counter the loss of Soviet support. The program rationed food, fuel, and electricity and gave priority to domestic food production, development of tourism, and biotechnology. The collapse of the sugar sector and its poor prospects emphasized the need to diversify agricultural production.

In 1993, the Cuban Government established a new form of cooperative—the Basic Unit of Cooperative Production, or UBPC—initiating the process of breaking up large state farms. While land title remains with the state, these cooperatives have the right to use the land and make production and resource decisions. State enterprises still provide marketing, technical assistance, production services, and agricultural inputs. Producers are allowed to sell surplus production after delivering a contracted monthly quota to the state.

In 1994, the Government established farmers' markets, where producers' surplus production can be sold at free-market prices. Farmers' markets now handle 25-30 percent of the farm products available to Cuban consumers.

Cuba also fostered the establishment of foreign "economic associations" (joint ventures, international contracts) to allow increased foreign investment in the tourism, mining, telecommunications, manufacturing, and construction sectors of the Cuban economy. To date, foreign investment in agriculture is relatively small, although associations have been created for citrus, tobacco, sugar, and rice. Cuba is also encouraging foreign investment in nonexport crops to support its growing tourist industry.

Since the initiation of reforms, GDP growth, consumption, and production are showing signs of recovery. Major growth areas in the Cuban economy are tourism, nickel and ore production, fisheries, manufacturing, tobacco, and vegetables. Cuban exports are growing and becoming more diversified (50 percent to Europe, 25 percent to Canada and Latin America, and 20 percent to Asia). Seafood has become a major source of export earnings.

Growth in tourism has been rapid. Cuba has natural resource advantages that should continue to spur tourist industry expansion. Tourism is now Cuba's biggest source of gross foreign exchange, earning \$1.4 billion in 1996, compared with \$900 million earned by sugar, Cuba's largest export. However, about 70 percent of this tourism foreign exchange is used to purchase inputs needed by the tourist industry.

While Cuba's economic recovery has started, severe problems remain. The Cuban trade deficit continues, foreign exchange problems persist, and energy is still in short supply. Agricultural

Cuba's Economic Geography

Cuba, the largest country in the Caribbean, is 90 miles south of Key West, Florida. It has a tropical climate, moderated by trade winds, with a landscape of flat to rolling plains and rugged hills and mountains in the southeast. The natural resource base includes cobalt, nickel, iron ore, copper, manganese, salt, timber, and silica. The leading sources of foreign exchange, in order of importance, are tourism, sugar, nickel, seafood, and tobacco.

Cuba has about 11 million people and its annual population growth rate is 0.4 percent. Sixty percent of the Cuban people were born after the 1959 revolution, and the average age is 23. The literacy rate is more than 95 percent.

Cuba has nearly as much land area as the rest of the Caribbean islands combined. Its 11 million hectares make Cuba about the same size as Ohio or about three-fourths the size of Florida. About 60 percent of the land is in agriculture. Seventy percent of the agricultural land is tilled and 20 percent of the tilled land is irrigated. Due to extensive deforestation, high freshwater withdrawal rates, heavy mineral concentrations, and pollution, Cuba faces problems with its water supply.

About 40 percent of the tilled land is planted to sugarcane and about 11 percent to vegetables. The sugar industry has been one of Cuba's major industries, particularly through the 1980's, employing about one-sixth of the population and consuming about one-third of Cuban resources (land, other inputs). Sugar products represent about 80 percent of the value of Cuban exports and contribute about 10 percent of Cuba's GDP.

production has not completely returned to pre-crisis levels. Industry infrastructure remains in poor condition, and investment resources are still in short supply. Problems are still serious enough to keep Cuba's economic austerity program in place.

Cuba's Agricultural Export Prospects

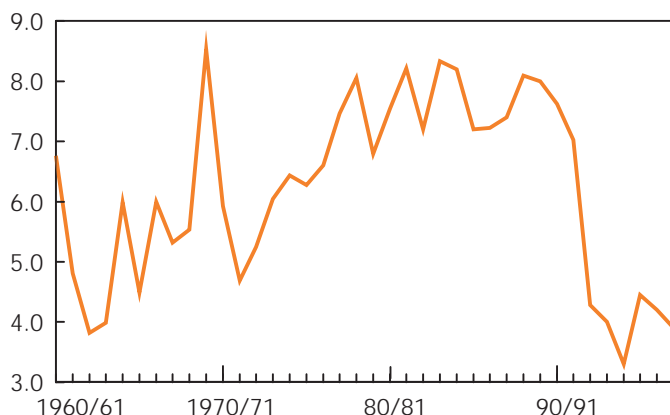
A number of Cuban-produced commodities have been identified as likely candidates for export and/or investment once commercial relations between Cuba and the U.S. resume. The commodities are sugar, citrus, vegetables, tropical fruits, and fisheries, according to a University of Florida-University of Havana study of Cuba's agricultural and fisheries economy. The work of this ongoing study was reported at a workshop sponsored by the University of Florida's International Agricultural Trade and Development Center and the National Center for Food and Agricultural Policy. Held on March 31, 1998, the workshop addressed the *Role of the Agricultural Sector in Cuba's Integration into the Global Economy and its Future Economic Structures: Implications for Florida and U.S. Agriculture*.

Sugar. For most of this century, the Cuban sugar industry has been subsidized by foreign countries. Until 1960, the U.S. received more than 33 percent of its sugar needs from Cuba

Special Article

Cuban Sugar Production Plunged in the Early 1990's

Million metric tons



1996/97 preliminary; 1997/98 forecast.

Source: University of Florida.

Economic Research Service, USDA

under the U.S. Sugar Act. From 1960 through 1991, the Soviet Union bartered low-priced oil for high-priced sugar. Thus, until 1992, the Cuban sugar economy enjoyed guaranteed markets at premium prices—with little incentive to improve efficiency.

After the 1959 revolution, Cuban leadership blamed the sugar industry for the country's underdevelopment. When the Government abandoned care of sugarcane fields and shifted land to other agricultural products, the sugar industry infrastructure deteriorated. Sugar production fell from an average annual volume of 5.6 million metric tons in the 1950's to 5.2 million metric tons in the 1960's. In the 1969-70 sugar season, a policy change declared sugar to be the backbone of the economy. Sugar production rebounded to an annual average of 6.4 million metric tons in the 1970's and 7.7 million metric tons in the 1980's. After the loss of Soviet support, sugar production collapsed from 8.1 million metric tons in 1989 to 4 million metric tons in 1993-96. *CubaNews* (May 1998) reports that 1998 may bring one of the poorest sugar harvests ever, with production at about 3 million metric tons.

Cuba's sugar market problem is an issue of production, not export demand. Most Cuban sugar is produced as raw sugar for further refining in the countries that import it. Cuba has historically been a low-yield, high-cost sugar producer and an inefficient manager. Production costs averaged 90 percent above world market prices in 1986-90 and 50-70 percent above in 1996-97. The industry is characterized by small, inefficient mills. Ninety percent of the sugar mills were built before 1925.

The sugar industry has been particularly hard hit by the lack of foreign exchange to purchase needed production inputs (fertilizer, oil, parts and equipment). The related energy crisis has also led to a breakdown of the transportation system, which causes a further reduction in sugar refining.

In reaction to the severe production drop, Cuba created sugar UBPC's and opened the sector to foreign capital investment to help modernize and expand crushing capacity (principal, interest, and a portion of profit are paid in sugar). Given economic incentives and increased investments in the industry, Cuban sugar production, and therefore exports, could rebound. However, current world market conditions and the unsettled situation in Cuba make the likelihood of major, long-term investment flows into Cuba's sugar industry remote.

Citrus. Cuba is the third major grapefruit producer in the world, behind the U.S. and Israel. Cuban citrus is sent to both fresh and processed export markets. Fifty percent of processed fruit in Cuba is grapefruit. Oranges (60 percent) and grapefruit (36 percent) comprise nearly all of Cuba's citrus production.

The Cuban grapefruit harvest starts in mid-August. If the embargo is lifted, this early harvest could put grapefruit (particularly red seedless grapefruit) in U.S. markets in August-September when U.S. supply is small.

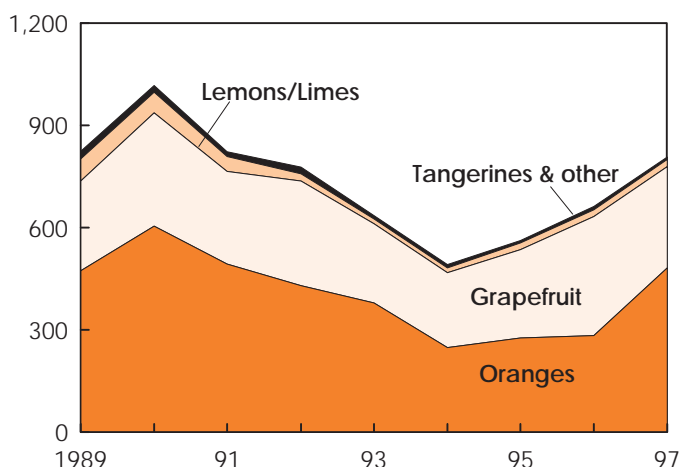
Cuban oranges are Valencia (like Florida's) and, because of seed content and external appearance, would not compete in the U.S. fresh market with either California varieties or even Florida Valencias. Most are exported to Western Europe.

Cuba also produces Persian limes, for which U.S. fresh demand is growing and U.S. production is small. Mexico is the current major U.S. supplier, but Cuban Persian limes could be competitive in the U.S. market if U.S.-Cuba trade were initiated.

In addition, processing industry byproducts—such as essential oils, lime juice, and pectin—could enter and compete in an opened U.S. market. Conversely, Florida has the potential for becoming a major supplier of inputs and technology to Cuba's citrus industry.

Citrus Production Has Risen From Low Level of 1994

1,000 metric tons



1997 preliminary.

Source: University of Florida.

Vegetables and tropical fruits. Fruits and vegetables are a key component of Cuban agricultural production. Much of the produce is consumed fresh in the domestic market. However, the seasonality of production creates demand for processed products.

Production fell in 1993, and that year the large state farms were converted to UBPC's and the cooperatives were allowed to sell a portion of their production in farmers' markets at market prices. This improved environment for potential earnings is resulting in increased production.

Nevertheless, the processing industry has been hampered by production declines of the 1990's, as well as by diminished investment, reduced energy supplies, and lack of foreign exchange to support purchase of imported inputs (particularly containers).

There is some potential to expand tropical fruit and fresh vegetable production for export, particularly to fill niche markets. However, lack of storage and transportation infrastructure are significant limiting factors. Because of resource constraints, Cuba has had to rely on organic methods of production rather than agrochemical inputs. As a result, Cuban agriculture is already heavily organic and could supply a significant part of the U.S. niche market for organic products.

Any exports to the U.S. would be subject to compliance with U.S. sanitary and phytosanitary regulations. Organic products would have to satisfy U.S. guidelines for organic certification.

Fisheries. The fishing industry, which also suffered serious declines in the early 1990's, is now making a comeback and is an important source of foreign exchange for Cuba.

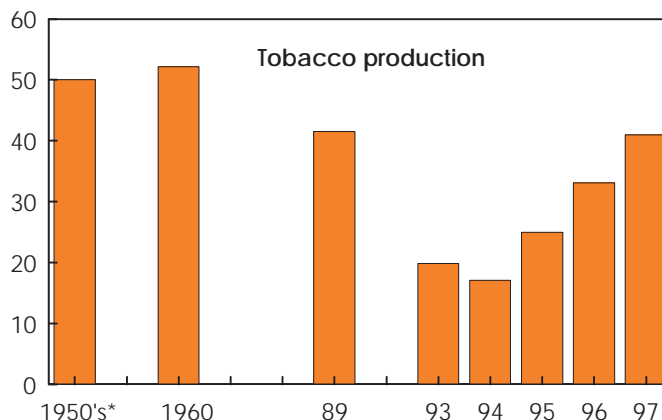
In the late 1970's, most nations in the hemisphere imposed 200-mile limits for territorial waters and denied Cuba access to these waters. Cuban fleets, which were designed to ply these waters, were forced to operate in more costly open-ocean waters. This left Cuba with a high-cost fleet that had to target the low-value fish from distant waters. This fleet was highly dependent on subsidized, low-cost Soviet oil, and the collapse of the Soviet Union caused a virtual shutdown of Cuba's high-seas fishing fleet.

Cuba's remaining fisheries industry has primarily targeted near-shore high-value species. As with agriculture, Cuba's post-collapse policy reduced government oversight of fishing operations. Fishery cooperatives were formed, in which the Government continued to own the vessels and set budget and production quotas, but excess production could generate monthly bonuses.

Cuba has a production and shipping cost advantage compared with other Caribbean Basin countries that trade with the U.S. Growing U.S. demand offers a potential market for Cuban seafood, such as spiny lobster, pink shrimp, and reef fish (snapper, grouper).

Cuban Tobacco Industry Has Begun Recovering

1,000 metric tons



*Annual average. 1997 preliminary.

Source: University of Florida.

Economic Research Service, USDA

Cuban spiny lobster production averages 19.7 million pounds annually, compared with Florida's of 7.2 million pounds. Currently, Cuban spiny lobsters are exported to Japan and the European Union. Since 40 percent of Cuban spiny lobster production occurs during Florida's closed season, Cuba could readily capture a significant portion of the U.S. lobster tail market without directly competing with Florida's industry. In addition, the U.S. market could easily absorb Cuban shrimp and reef fish production.

Tobacco. Tobacco is Cuba's fifth leading foreign exchange earner. Cuban tobacco is famous for its quality and aroma. It is used extensively in cigar manufacturing. As with other agricultural commodities, both tobacco production and cigar output fell drastically after the collapse of the Soviet Union. Continuing shortages of inputs and energy have restricted recovery. Cuba estimates that it now meets only about one-fourth of world demand for Havana cigars.

Spain, France, and the United Kingdom currently have investments in the Cuban tobacco industry. Opening the U.S. market would create a new, large, high-income market for both Cuban cigars and Cuban unmanufactured tobacco for blending with U.S. tobacco in the manufacture of cigars.

Potential U.S.-Cuba Agricultural Trade

Once Cuba has a transition government committed to economic and political reform and the establishment of a fully democratic, pluralistic society, the U.S. will begin normalizing relations and providing assistance to support Cuba's transition. Economic sanctions would then be suspended and negotiations would be initiated to promote bilateral trade.

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The most likely candidates for Cuban export to the U.S. are sugar, citrus, vegetables and tropical fruits, seafood, and tobacco. While Cuba is a potential competitor in some of these commodities, particularly those produced in Florida, many Cuban exports would be either complementary or seasonally noncompetitive.

Cuba continues to import a significant amount of agricultural products. Its foreign food needs are primarily temperate-zone products that have become staples in their diet and cannot be easily produced domestically. The general consensus is that U.S. agricultural exports to Cuba could be about \$1 billion annually. This estimate takes into account U.S.-Cuba trade before the revolution, U.S. trade with other Caribbean countries with comparable resources, and Cuba's production potential.

The bulk of U.S. food exports would be rice, coarse grains, beans, wheat flour, and animal products. Before the revolution, Cuba had a livestock sector with substantial U.S. investment, and there is potential for relatively large-scale livestock production to resume. A recent U.S. Grains Council study concluded that Cuba would import about 500,000 tons of feed grains annually if U.S. sanctions on trade were lifted.

Cuba's sugar, rice, and tobacco crops are dependent on imported inputs in order to sustain yields. Fuel and petroleum imports are also critical for maintaining Cuba's productive capacity. Potential U.S. agricultural input exports to Cuba include fertilizer, herbicides, pesticides, agricultural machinery, and other technology.

Increased trade is, in part, dependent on increased foreign investment in the Cuban economy. In addition to providing opportunities to the firms that invest, this would increase Cuba's economic growth, generating greater consumption and a corresponding growth in Cuban import demand.

During the 1990's, Cuba significantly increased the number of foreign economic associations. These associations consisted of one or more national investors and one or more foreign investors forming either joint production ventures or joint international economic association contracts to produce goods or provide services for profit. Over \$5 billion in foreign investments in Cuba have been announced since the policy reforms, but only about \$1 billion has been invested. More than 90 percent of this investment has come from Mexico, Canada, Australia, Spain, South Africa, the Netherlands, Brazil, and Chile. Major areas of investment are tourism, mining, telecommunications, and basic manufacturing.

Foreign investment in agriculture has been relatively small to date. Only about 10 percent of all foreign investment in Cuba has been in agriculture. Lifting U.S. sanctions on trade and financial relations could lead to a significant amount of U.S. capital investment flowing into Cuba, particularly from Florida. U.S. foreign investment in Cuba's agriculture would most likely target Cuba's export industries and its vegetable production activities. In addition to direct investments, imports of agricultural inputs would likely generate a significant amount of financial credit to Cuba and Cuban industry, with much of it likely provided by U.S. sources.

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October Releases—USDA's Agricultural Statistics Board

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

October

- 2 *Cheddar Cheese Prices (8:30 a.m.)*
Dairy Products
Poultry Slaughter
- 5 *Egg Products*
Crop Progress (after 4 p.m.)
- 7 *Broiler Hatchery*
- 8 *Vegetables*
- 9 *Cheddar Cheese Prices (8:30 a.m.)*
Cotton Ginnings (8:30 a.m.)
Crop Production (8:30 a.m.)
- 13 *Crop Progress (after 4 p.m.)*
- 14 *Broiler Hatchery*
- 15 *Milk Production*
Turkey Hatchery
- 16 *Cheddar Cheese Prices (8:30 a.m.)*
Cattle on Feed
- 19 *Crop Progress (after 4:00 p.m.)*
- 20 *Cold Storage*
- 21 *Broiler Hatchery*
- 23 *Cheddar Cheese Prices (8:30 a.m.)*
Cotton Ginnings (8:30 a.m.)
Catfish Processing
Chickens and Eggs
Livestock Slaughter
- 26 *Crop Progress (after 4 p.m.)*
- 28 *Broiler Hatchery*
- 29 *Catfish Production*
Peanut Stocks and Processing
- 30 *Cheddar Cheese Prices (8:30 a.m.)*
Rice Stocks (8:30 a.m.)
Agricultural Prices

Statistical Indicators

Summary Data

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

				1997	1998 F				1999 F	
	1997	1998 F	1999 F	IV	I	II	III	IV	I	II
Prices received by farmers (1990-92=100)	107	--	--	107	106	102	103	--	--	--
Livestock & products	98	--	--	99	97	94	96	--	--	--
Crops	115	--	--	115	113	110	112	--	--	--
Prices paid by farmers (1990-92=100)								--	--	--
Production items	117	--	--	117	116	115	114	--	--	--
Commodities and services, interest, taxes, and wages	117	--	--	117	117	117	117	--	--	--
								--	--	--
Cash receipts (\$ bil.) ¹	208	201	--	50	64	49	44	49	59	--
Livestock	97	94	--	25	25	23	23	24	24	--
Crops	112	107	--	25	39	26	21	25	35	--
Market basket (1982-84=100)										
Retail cost	160	--	--	161	162	162	--	--	--	--
Farm value	106	--	--	105	102	104	--	--	--	--
Spread	189	--	--	191	194	194	--	--	--	--
Farm value/retail cost (%)	23	--	--	23	23	22	--	--	--	--
Retail Prices (1982-84=100)										
All food	157	160	163	159	160	160	161	161	162	163
At home	158	160	162	159	160	160	161	160	162	163
Away from home	157	161	165	159	160	161	162	163	164	165
Agricultural exports (\$ bil.) ²	57.4	54.5	52.0	13.2	12.9	16.3	14.3	11.8	14.3	13.7
Agricultural imports (\$ bil.) ²	35.8	38.0	39.5	9.3	8.7	9.2	9.8	9.7	10.4	9.7
Commercial production										
Red meat (mil. lb.)	43,209	44,940	43,915	11,167	11,038	11,015	11,514	11,373	10,871	10,863
Poultry (mil. lb.)	33,258	33,627	35,045	8,383	8,258	8,439	8,455	8,475	8,435	8,895
Eggs (mil. doz.)	6,460	6,622	6,765	1,667	1,637	1,635	1,660	1,690	1,665	1,675
Milk (bil. lb.)	156.6	157.8	160.1	38.2	39.2	40.9	38.9	38.7	39.8	41.5
Consumption, per capita										
Red meat and poultry (lb.)	208.6	212.6	213.0	53.9	51.7	52.3	54.0	54.7	52.1	53.1
Corn beginning stocks (mil. bu.) ³	425.9	883.2	1,433.7	2,496.6	883.2	7,246.8	4,939.9	3,039.1	--	--
Corn use (mil. bu.) ³	8,849.5	8,825.0	--	1,617.1	3,004.2	2,307.8	1,904.4	--	--	--
Prices ⁴										
Choice steers--Neb. Direct (\$/cwt)	66.32	62-63	69-75	66.61	61.73	64.16	59-60	61-65	68-74	71-77
Barrows and gilts--IA, So. MN (\$/cwt)	51.36	33-34	32-35	43.53	34.74	39.42	32-33	27-29	31-33	34-36
Broilers--12-city (cents/lb.)	58.80	62-63	56-61	54.00	56.40	61.00	70-71	60-64	56-60	57-61
Eggs--NY gr. A large (cents/doz.)	81.20	75-77	70-76	88.20	79.00	66.50	76-77	80-84	72-78	62-68
Milk--all at plant \$/cwt)	13.34	14.90- 15.10	13.35- 14.35	14.53	14.60	13.73	15.10- 16.80	16.30- 16.80	14.15- 14.95	12.85- 13.85
Wheat--KC HRW ordinary (\$/bu.)	4.16	--	--	3.82	3.62	3.32	--	--	--	--
Corn--Chicago (\$/bu.)	2.78	--	--	2.74	2.72	2.49	--	--	--	--
Soybeans--Chicago (\$/bu.)	7.63	--	--	6.95	6.68	6.95	--	--	--	--
Cotton--avg. spot 41-34 (cents/lb)	69.89	--	--	67.64	64.48	66.86	--	--	--	--
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Farm real estate values ⁵										
Nominal (\$ per acre)	668	683	703	713	736	782	832	890	945	1,000
Real (1982 \$)	539	528	521	507	511	529	550	574	598	620

F = Forecast. -- = Not available. 1. Quarterly data seasonally adjusted at annual rates. 2. Annual data based on Oct.-Sept.

fiscal years ending with year indicated. 3. Sept.-Nov. first quarter; Dec.-Feb. second quarter; Mar.-May third quarter; Jun.-Aug.

fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 4. Simple averages, Jan.-Dec. 5.

1990-98 values as of January 1. 1989 values as of February 1.

U.S. & Foreign Economic Data

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

				1996		1997			1998	
	1995	1996	1997	IV	I	II	III	IV	I	II
<i>Billions of current dollars (quarterly data seasonally adjusted at annual rates)</i>										
Gross Domestic Product	7,265.4	7,636.0	8,110.9	7,792.9	7,933.6	8,063.4	8,170.8	8,254.5	8,384.2	8,435.2
Gross National Product	7,287.1	7,674.0	8,102.9	7,829.0	7,952.4	8,062.3	8,162.0	8,234.9	8,369.4	8,418.5
Personal consumption expenditures	4,957.7	5,207.6	5,493.7	5,308.1	5,405.7	5,438.8	5,540.3	5,593.2	5,676.5	5,770.6
Durable goods	608.5	634.5	673.0	638.2	658.4	659.9	681.2	682.2	705.1	719.9
Nondurable goods	1,475.8	1,534.7	1,600.6	1,560.1	1,587.4	1,588.2	1,611.3	1,613.2	1,633.1	1,654.0
Food	735.1	756.1	780.9	766.6	775.5	775.8	785.3	787.1	796.9	809.5
Clothing and shoes	254.7	264.3	278.0	266.2	275.2	275.6	280.9	280.7	291.0	295.2
Services	2,873.4	3,038.4	3,220.1	3,109.8	3,159.9	3,190.7	3,247.9	3,297.8	3,338.2	3,396.8
Gross private domestic investment	1,038.2	1,116.5	1,256.0	1,151.1	1,193.6	1,259.9	1,265.7	1,292.0	1,366.6	1,344.6
Fixed investment	1,008.1	1,090.7	1,188.6	1,119.2	1,127.5	1,176.4	1,211.1	1,220.1	1,271.1	1,304.4
Change in business inventories	30.1	25.9	67.4	31.9	66.1	83.5	54.6	71.9	95.5	40.2
Net exports of goods and services	-86.0	-94.8	-93.4	-88.6	-98.8	-86.8	-94.7	-98.8	-123.7	-160.3
Government consumption expenditures and gross investment	1,355.5	1,406.7	1,454.6	1,422.3	1,433.1	1,451.5	1,459.5	1,468.1	1,464.9	1,480.3
<i>Billions of 1992 dollars (quarterly data seasonally adjusted at annual rates)¹</i>										
Gross Domestic Product	6,742.1	6,928.4	7,269.8	7,017.4	7,101.6	7,236.5	7,311.2	7,364.6	7,464.7	7,494.9
Gross National Product	6,779.5	7,008.4	7,266.2	7,105.3	7,167.8	7,239.3	7,307.0	7,350.7	7,455.2	7,484.0
Personal consumption expenditures	4,595.3	4,714.1	4,913.5	4,756.4	4,818.1	4,872.7	4,947.0	4,981.0	5,055.1	5,127.3
Durable goods	583.6	611.1	668.6	617.1	637.8	653.8	679.6	684.8	710.3	729.1
Nondurable goods	1,412.6	1,432.3	1,486.3	1,441.2	1,457.8	1,477.1	1,495.7	1,494.3	1,521.2	1,539.7
Food	690.5	689.7	699.3	689.0	694.6	697.3	700.6	699.9	706.8	715.7
Clothing and shoes	257.5	267.7	288.4	270.0	277.1	283.3	291.9	292.3	307.4	311.3
Services	2,599.6	2,671.0	2,761.5	2,698.2	2,723.9	2,743.6	2,775.4	2,804.8	2,829.3	2,865.3
Gross private domestic investment	991.5	1,069.1	1,206.4	1,104.8	1,149.2	1,211.3	1,215.8	1,241.9	1,321.8	1,306.8
Fixed investment	962.1	1,041.7	1,138.0	1,068.7	1,079.0	1,127.0	1,159.3	1,169.5	1,224.9	1,263.5
Change in business inventories	27.3	25.0	63.2	32.9	63.7	79.0	51.0	66.5	91.4	39.1
Net exports of goods and services	-98.8	-114.4	-136.1	-105.6	-126.3	-131.6	-142.4	-149.0	-198.5	-246.3
Government consumption expenditures and gross investment	1,251.9	1,257.9	1,285.0	1,261.8	1,260.5	1,284.4	1,288.9	1,289.2	1,283.0	1,294.6
GDP implicit price deflator (% change)	2.3	1.9	1.9	1.8	2.8	1.6	1.2	1.2	0.8	0.8
Disposable personal income (\$ bil.)	5,277.0	5,534.7	5,795.1	5,630.1	5,711.2	5,767.9	5,821.8	5,879.4	5,937.1	5,993.4
Disposable per. income (1992 \$ bil.)	4,906.0	5,043.0	5,183.1	5,089.0	5,130.8	5,167.5	5,198.4	5,235.8	5,287.1	5,325.3
Per capita disposable pers. income (\$)	20,050	20,840	21,633	21,127	21,391	21,558	21,709	21,871	22,046	22,209
Per capita disp. pers. income (1992 \$)	18,640	18,989	19,349	19,096	19,217	19,315	19,385	19,478	19,632	19,733
U.S. resident population plus Armed Forces overseas (mil.) ²	263.0	265.5	267.9	266.4	266.9	267.5	268.1	268.9	269.3	269.9
Civilian population (mil.) ²	261.4	263.9	266.4	264.9	265.4	266.0	266.6	267.3	267.8	268.4
<i>Monthly data seasonally adjusted</i>										
	1995	1996	1997	Jul	Feb	Mar	Apr	May	Jun	Jul
Total industrial production (1992=100)	116.0	120.2	127.0	126.9	130.6	130.8	131.6	131.7	130.2	129.3
Leading economic indicators (1992=100)	100.8	102.0	103.8	103.6	105.0	105.2	105.3	105.2	105.0	105.4
Civilian employment (mil. persons) ³	124.9	126.7	129.6	129.7	131.2	131.0	131.4	131.5	131.2	131.1
Civilian unemployment rate (%) ³	5.6	5.4	4.9	4.9	4.6	4.7	4.3	4.3	4.5	4.5
Personal income (\$ bil. annual rate)	6,072.1	6,425.2	6,784.0	6,785.8	7,007.3	7,033.9	7,054.5	7,084.9	7,103.0	7,137.2
Money stock-M2 (daily avg.) (\$ bil.) ⁴	3,651.2	3,826.1	4,045.8	3,922.5	4,103.9	4,132.3	4,165.1	4,174.9	4,193.0	4,209.3
Three-month Treasury bill rate (%)	5.51	5.02	5.07	5.07	5.11	5.03	5.00	5.03	4.99	4.96
AAA corporate bond yield (Moody's) (%)	7.59	7.37	7.27	7.14	6.67	6.72	6.69	6.69	6.53	6.55
Total housing starts (1,000) ⁵	1,354.1	1,476.8	1,474.0	1,461	1,616	1,585	1,546	1,538	1,626	1,718
Business inventory/sales ratio ⁶	1.43	1.40	1.38	1.37	1.38	1.38	1.39	1.39	1.38	--
Sales of all retail stores (\$ bil.) ⁷	2,346.3	2,465.1	2,546.3	214.9	220.9	221.1	222.7	225.5	225.6	224.4
Nondurable goods stores (\$ bil.)	1,405.6	1,457.8	1,505.4	126.3	128.1	128.5	129.3	130.4	130.3	131.1
Food stores (\$bil.)	408.4	424.2	432.1	35.8	36.1	36.4	36.6	36.8	36.9	37.1
Apparel and accessory stores (\$ bil.)	109.5	113.0	116.8	10.0	10.3	10.4	10.5	10.4	10.3	10.5
Eating and drinking places (\$ bil.)	239.9	238.4	244.1	19.8	20.3	20.3	20.3	20.5	20.5	20.5

-- = Not available. 1. In April 1996, 1992 dollars replaced 1987 dollars. 2. Population estimates based on 1990 census. 3. Data beginning January 1994 not directly comparable with data for earlier periods because of a major redesign of household survey questionnaire. 4. Annual data as of December of year listed. 5. Private, including farm. 6. Manufacturing and trade. 7. Annual total. *Information contact: David Johnson (202) 694-5324*

Table 3—World Economic Growth

	Calendar year									
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
<i>Real GDP, annual percent change</i>										
World	2.6	1.8	1.9	1.6	3.1	2.7	3.4	3.4	1.9	2.0
less U.S.	3.1	2.9	1.6	1.3	3.0	2.9	3.4	3.2	1.4	2.1
Developed Economies	2.7	1.7	1.5	0.8	2.7	2.1	2.8	2.8	2.0	1.9
less U.S.	3.5	3.0	1.0	0.0	2.4	2.1	2.5	2.1	1.2	1.9
United States	1.2	-0.9	2.7	2.3	3.5	2.3	3.4	3.9	3.4	1.8
Canada	0.3	-1.9	0.9	2.5	3.9	2.2	1.2	3.7	2.9	2.7
Japan	5.1	3.8	1.0	0.3	0.7	1.4	4.1	0.8	-2.5	0.3
Australia	1.5	-0.7	2.4	3.9	5.5	3.5	3.7	3.3	3.2	2.8
European Union	3.1	3.6	0.9	-0.6	3.0	2.4	1.7	2.6	2.8	2.5
Transition Economies	-4.2	-6.9	-11.2	-6.5	-8.8	-1.5	-2.2	5.1	-2.0	-7.7
Eastern Europe	-6.3	-10.6	-4.0	0.8	3.5	5.5	3.0	1.4	3.2	1.8
Poland	-10.8	-6.3	2.0	3.8	4.2	7.1	5.9	7.0	5.9	3.9
Former Soviet Union	-3.5	-5.5	-13.7	-9.3	-13.9	-5.1	-5.1	7.5	-5.0	-13.6
Russia	-3.0	-5.0	-14.5	-8.7	-12.6	-4.1	-4.9	2.2	-5.8	-15.0
Developing Economies	3.8	4.8	6.3	6.2	6.7	5.7	6.4	5.5	2.2	3.6
Asia	5.8	6.6	8.9	8.7	9.4	8.7	7.9	6.2	1.7	3.9
East Asia	5.1	8.8	10.9	10.7	10.8	9.3	8.4	7.8	3.9	5.8
China	3.8	9.3	14.2	13.5	12.6	10.5	9.6	8.8	6.7	7.2
Taiwan	5.4	7.5	6.8	6.3	6.5	6.0	5.7	6.8	5.0	4.4
Korea	9.5	9.2	5.1	5.8	8.8	8.7	7.1	5.5	-5.7	2.2
Southeast Asia	8.2	6.8	6.9	7.4	8.1	8.5	7.3	4.9	-7.6	-2.1
Indonesia	8.9	8.9	7.2	7.2	7.5	8.2	7.6	4.9	-17.1	-6.0
Malaysia	9.7	8.8	7.8	8.4	9.4	9.5	8.0	7.8	-6.0	-1.2
Philippines	2.7	-0.2	0.3	2.1	4.4	4.8	5.7	5.1	-2.2	-3.4
Thailand	11.7	8.0	8.1	8.3	8.8	9.2	6.4	-0.4	-8.0	-2.1
South Asia	5.6	1.2	5.6	4.6	7.0	6.9	7.1	2.4	3.7	3.1
India	5.6	0.5	5.4	4.9	7.5	7.3	7.5	2.1	4.0	3.5
Pakistan	4.5	5.5	7.8	1.9	3.9	5.1	4.6	3.0	2.0	1.0
Latin America	-0.1	3.7	2.9	3.9	5.2	0.2	3.6	4.8	2.5	2.8
Mexico	5.1	4.2	3.6	2.0	4.5	-6.3	5.2	7.0	4.0	3.3
Caribbean/Central	0.7	4.0	8.0	4.9	4.4	2.9	8.1	-2.9	4.3	3.9
South America	-1.4	3.5	2.6	4.5	5.4	1.9	3.0	4.4	2.1	2.6
Argentina	0.2	8.9	8.6	6.0	7.4	-4.6	4.4	8.2	5.4	4.4
Brazil	-4.6	0.5	-1.2	4.5	5.8	3.0	2.9	2.9	0.6	1.7
Colombia	4.1	1.8	4.2	5.2	5.8	5.3	2.4	2.7	2.8	3.5
Venezuela	6.5	9.7	6.1	0.3	-2.9	3.4	-1.6	5.2	-0.5	0.0
Middle East	5.0	2.9	5.5	3.5	0.3	3.5	4.6	3.8	3.4	3.1
Israel	6.8	7.7	5.6	5.6	6.9	7.0	4.5	2.1	2.8	3.5
Saudi Arabia	8.7	8.4	2.8	-0.6	0.5	0.5	2.4	0.7	2.1	1.5
Turkey	9.3	0.9	6.0	8.0	-5.5	7.0	7.0	7.2	5.5	4.0
Africa	1.6	0.7	1.2	1.3	2.7	2.8	4.7	4.6	3.0	3.5
North Africa	2.2	1.0	2.2	0.1	2.8	2.4	5.6	2.5	4.2	4.1
Egypt	5.6	1.1	4.4	2.9	3.9	4.6	5.0	4.9	3.7	4.0
Sub-Sahara	1.1	0.5	0.3	2.5	2.6	3.2	4.0	6.6	1.9	2.9
South Africa	-0.5	-1.0	-2.6	1.5	2.8	3.1	3.3	1.7	0.4	2.2
<i>Consumer prices, percent change</i>										
Developed Economies	5.2	4.6	3.5	3.0	2.6	2.5	2.4	2.1	2.1	2.0
Transition Economies	38.6	95.8	656.6	609.3	268.4	124.1	41.4	27.8	13.8	8.7
Developing Economies	68.1	36.2	38.3	46.8	50.7	21.7	13.7	8.5	10.2	8.5
Asia	6.5	7.8	6.8	10.3	14.7	11.9	6.7	3.9	8.0	6.2
Latin America	438.3	129.1	151.4	208.8	210.2	35.9	22.3	13.1	9.1	7.4
Middle East	22.4	27.5	25.6	24.6	31.9	35.9	24.5	22.6	26.6	26.3
Africa	17.5	24.3	32.1	31.2	34.6	33.9	26.2	10.5	7.5	6.0

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

Farm Prices

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

	Annual			1997		1998				
	1995	1996	1997	Aug	Mar	Apr	May	Jun	Jul	Aug
<i>1990-92=100</i>										
Prices received										
All farm products	102	112	107	108	102	104	103	102	102	101
All crops	112	126	115	116	111	115	113	107	107	103
Food grains	134	157	128	122	118	112	109	96	89	87
Feed grains and hay	112	146	117	115	113	109	108	105	101	92
Cotton	127	122	112	111	105	103	105	113	110	109
Tobacco	103	105	104	92	104	97	--	--	94	92
Oil-bearing crops	104	128	130	128	114	112	112	111	111	97
Fruit and nuts, all	100	118	109	124	94	102	110	124	131	143
Commercial vegetables	120	109	120	124	127	156	128	108	122	104
Potatoes and dry beans	107	114	93	109	107	106	112	105	104	91
Livestock and products	92	99	99	99	95	95	95	98	96	99
Meat animals	85	87	92	94	82	84	87	86	79	79
Dairy products	98	114	102	97	110	107	101	107	108	117
Poultry and eggs	107	120	114	117	108	109	107	115	121	132
Prices paid										
Commodities and services,										
interest, taxes, and wage rates	110	115	116	117	116	116	116	115	115	115
Production items	109	115	116	117	114	114	114	113	112	112
Feed	104	130	122	121	112	111	108	105	106	106
Livestock and poultry	82	75	93	97	91	94	91	88	83	83
Seeds	110	115	119	120	120	123	123	123	123	123
Fertilizer	120	124	121	119	114	114	115	115	114	113
Agricultural chemicals	115	119	121	119	122	122	121	122	122	121
Fuels	94	105	103	108	89	91	94	88	85	83
Supplies and repairs	112	115	117	118	118	119	119	118	119	119
Autos and trucks	107	108	109	118	119	119	118	118	118	118
Farm machinery	120	125	128	129	131	132	132	132	132	132
Building material	114	115	118	118	118	118	118	118	118	119
Farm services	118	118	118	117	116	116	116	117	118	118
Rent	116	119	119	121	124	124	124	124	124	124
Int. payable per acre on farm real estate debt	101	105	106	107	108	108	108	108	108	108
Taxes payable per acre on farm real estate	109	112	115	115	119	119	119	119	119	119
Wage rates (seasonally adjusted)	114	117	123	119	131	130	130	130	125	125
Production items, interest, taxes, and wage rates	109	114	116	116	115	115	115	114	113	113
Ratio, prices received to prices paid (%)*	93	98	92	92	88	90	89	89	89	88
Prices received (1910-14=100)	647	712	679	683	650	662	656	650	645	642
Prices paid, etc. (parity index) (1910-14=100)	1,437	1,504	1,527	1,556	1,525	1,528	1,522	1,536	1,528	1,527
Parity ratio (1910-14=100) (%)*	45	47	45	44	43	43	43	43	42	42

-- = Not available. Values for 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 is taken from the publication *Agricultural Prices*, which is produced monthly by USDA's National Agricultural Statistics Service (NASS) and is available at <http://jan.mannlib.cornell.edu/reports/nassr/price/pap-bb>. For historical data or for categories not listed here, call the National Agricultural Statistics Service (NASS) Information Hotline at 1-800-727-9540, or access the NASS Home Page at <http://www2.hqnet.usda.gov/nass>.

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

	Annual ¹		1997		1998					
	1995	1996	1997	Aug	Mar	Apr	May	Jun	Jul	Aug
Crops										
All wheat (\$/bu.)	4.55	4.30	3.45	3.56	3.32	3.15	3.06	2.77	2.56	2.46
Rice, rough (\$/cwt)	9.15	9.96	9.75	9.94	9.55	9.30	9.41	9.51	9.57	9.32
Corn (\$/bu.)	3.24	2.71	2.60	2.50	2.54	2.41	2.34	2.28	2.20	1.89
Sorghum (\$/cwt)	5.69	4.17	4.00	4.09	4.02	3.76	3.71	3.96	3.80	3.43
All hay, baled (\$/ton)	82.20	95.80	102.50	99.00	97.50	101.00	103.00	91.80	88.60	88.50
Soybeans (\$/bu.)	6.72	7.35	6.50	7.25	6.40	6.26	6.26	6.15	6.13	5.36
Cotton, upland (¢/lb.)	75.40	69.30	66.90	67.10	63.40	62.20	63.50	68.50	66.50	66.30
Potatoes (\$/cwt)	6.77	4.93	5.68	6.34	6.25	6.17	6.52	6.04	5.93	5.08
Lettuce (\$/cwt) ²	23.50	14.70	17.30	22.80	13.40	27.90	14.70	11.40	15.40	12.60
Tomatoes fresh (\$/cwt) ²	25.80	28.00	33.00	27.30	33.20	36.50	34.70	27.00	40.80	18.40
Onions (\$/cwt)	11.10	10.60	12.60	13.50	21.20	21.70	18.50	15.90	21.30	15.40
Beans, dry edible (\$/cwt)	20.80	23.50	17.70	20.40	20.10	20.80	21.10	21.30	21.40	21.10
Apples for fresh use (¢/lb.)	24.00	20.80	22.20	19.20	21.30	19.20	18.20	16.30	16.10	19.00
Pears for fresh use (\$/ton)	272.00	376.00	276.00	351.00	243.00	292.00	373.00	353.00	405.00	457.00
Oranges, all uses (\$/box) ³	4.23	5.01	4.57	7.03	4.75	5.82	5.68	6.41	5.85	5.37
Grapefruit, all uses (\$/box) ³	2.30	2.43	1.74	7.01	1.03	1.36	0.42	3.58	3.66	7.25
Livestock										
Cattle, all beef (\$/cwt)	61.80	58.70	63.10	63.90	61.30	63.00	63.00	61.80	58.40	57.90
Calves (\$/cwt)	73.10	58.40	78.90	88.00	89.80	90.80	88.90	81.70	76.60	76.20
Hogs, all (\$/cwt)	40.50	51.90	52.90	55.30	34.80	35.60	42.20	42.20	36.70	36.30
Lambs (\$/cwt)	78.20	88.20	90.30	92.70	70.00	66.10	63.30	88.70	81.00	--
All milk, sold to plants (\$/cwt)	12.78	14.75	13.36	12.70	14.40	14.00	13.20	14.00	14.10	15.30
Milk, manuf. grade (\$/cwt)	11.79	13.43	12.17	11.90	12.90	12.10	11.30	13.00	14.00	14.50
Broilers, live (¢/lb.)	34.40	38.10	37.70	39.90	35.20	36.50	36.90	40.30	43.20	46.90
Eggs, all (¢/doz.) ⁴	62.40	74.90	70.20	63.10	69.90	63.50	54.80	60.00	58.30	64.90
Turkeys (¢/lb.)	41.00	43.30	39.90	41.00	34.60	35.70	35.40	35.90	37.50	38.80

-- = Not available. Values for last two months 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 is taken from the publication *Agricultural Prices*, which is produced monthly by USDA's National Agricultural Statistics Service (NASS) and is available at <http://jan.mannlib.cornell.edu/reports/nassr/price/pap-bb>. For historical data or for categories not listed here, call the National Agricultural Statistics Service (NASS) Information Hotline at 1-800-727-9540, or access the NASS Home Page at <http://www2.hqnet.usda.gov/nass>.

Producer & Consumer Prices

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

	Annual		1997		1998					
	1995	1996	1997	Aug	Mar	Apr	May	Jun	Jul	Aug
<i>1982-84=100</i>										
Consumer Price Index, all items	152.4	156.9	160.5	160.8	162.2	162.5	162.8	163.0	163.2	163.4
CPI, all items less food	153.1	157.5	161.1	161.3	162.6	163.0	163.3	165.3	163.6	163.9
All food	148.4	153.3	157.3	157.6	159.7	159.8	160.3	160.1	160.5	161.0
Food away from home	149.0	152.7	157.0	157.4	159.9	160.2	160.6	160.7	161.1	161.5
Food at home	148.8	154.3	158.1	158.5	160.2	160.2	160.7	160.5	160.8	161.4
Meats ¹	135.5	140.2	144.4	145.5	142.2	140.8	141.0	141.5	141.8	142.2
Beef and veal	134.9	134.5	136.8	137.0	136.8	136.5	136.3	136.3	136.1	137.0
Pork	134.8	148.2	155.9	158.6	149.5	145.9	147.6	148.7	149.7	149.9
Poultry	143.5	152.4	156.6	155.6	155.1	154.3	155.6	155.5	156.6	158.9
Fish and seafood	171.6	173.1	177.1	177.5	180.3	181.0	180.9	180.5	181.4	183.5
Eggs	120.5	142.1	140.0	137.7	136.4	139.1	128.6	126.3	127.5	135.4
Dairy products ²	132.8	142.1	145.5	143.4	148.4	148.5	148.1	148.1	148.2	150.5
Fats and oils ³	137.3	140.5	141.7	141.4	142.2	140.7	141.2	143.3	147.6	149.7
Fresh fruits	219.0	234.4	236.3	237.0	235.9	241.6	249.0	247.3	247.4	248.7
Processed fruits	137.1	145.2	148.8	148.7	--	--	--	--	--	--
Fresh vegetables	193.1	189.2	194.6	192.3	220.2	219.7	229.7	214.7	214.0	205.6
Potatoes	174.7	180.6	174.2	194.0	181.6	179.9	187.7	193.1	196.5	192.7
Processed vegetables	138.3	143.9	147.2	149.1	--	--	--	--	--	--
Cereals and bakery products	167.5	174.0	177.6	178.6	179.6	180.2	180.5	181.6	181.8	182.7
Sugar and sweets	137.5	143.7	147.8	147.8	150.8	150.1	149.5	150.5	149.9	150.2
Nonalcoholic beverages ⁴	131.7	128.6	133.4	136.7	134.2	133.9	132.9	132.8	132.3	132.0
Apparel										
Apparel, commodities less footwear	129.3	128.5	129.4	125.9	--	--	--	--	--	--
Footwear	125.4	126.6	127.6	126.3	126.5	127.9	128.3	128.2	127.0	127.7
Tobacco and smoking products	225.7	232.8	243.7	243.4	254.1	263.5	270.0	266.9	273.2	273.7
Alcoholic beverages	153.9	158.5	162.8	163.2	165.1	165.2	165.2	165.5	165.6	165.7

-- = Not available. 1. Beef, veal, lamb, pork, and processed meat. 2. Includes butter. 3. Includes butter as of Jan. 198. 4. Includes fruit juices as of Jan. 198.

This table is compiled with data provided by the Bureau of Labor Statistics (BLS). BLS operates a website at <http://stats.bls.gov/bls/home.html> and a Consumer Prices Information Hotline at (202) 606-7828.

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

	Annual			1997		1998				
	1995	1996	1997	Aug	Mar	Apr	May	Jun	Jul	Aug
	1982=100									
All commodities	124.8	127.7	127.6	127.2	124.7	124.9	124.9	128.4	124.8	124.2
Finished goods ¹	127.9	131.3	131.8	131.7	130.1	130.4	130.4	130.6	130.9	130.6
All foods ²	126.7	132.5	132.8	132.6	131.5	132.0	131.9	131.8	132.5	132.8
Consumer foods	129.0	133.6	134.5	134.9	133.4	133.8	133.5	133.6	134.6	135.0
Fresh fruits and melons	85.7	100.8	99.4	82.4	86.3	90.3	90.6	89.6	88.7	90.2
Fresh and dry vegetables	144.4	135.0	123.1	131.7	156.9	167.8	132.8	120.9	146.6	116.4
Dried and dehydrated fruits	121.2	124.2	124.9	125.7	122.3	122.5	127.4	127.4	127.4	125.6
Canned fruits and juices	129.4	137.5	137.6	137.1	134.2	134.1	134.1	133.8	134.6	134.4
Frozen fruits, juices and ades	115.9	123.9	117.2	117.8	112.5	112.2	115.5	115.4	117.5	116.3
Fresh veg. except potatoes	139.8	120.9	121.3	125.2	148.2	162.9	123.2	106.5	153.7	114.9
Canned vegetables and juices	116.6	121.2	120.1	119.3	121.8	121.8	122.0	121.9	122.2	123.1
Frozen vegetables	124.2	125.4	125.8	125.6	124.8	125.7	126.1	125.3	125.6	125.6
Potatoes	142.6	133.9	106.1	159.0	120.9	125.5	136.3	120.4	116.0	106.5
Eggs for fresh use (1991=100)	86.3	105.1	97.1	88.0	98.6	83.6	71.2	86.9	80.8	91.3
Bakery products	164.3	169.8	173.9	174.0	175.1	175.7	175.8	175.7	175.6	176.0
Meats	102.9	109.0	111.6	115.4	100.0	101.2	105.3	105.9	102.9	104.5
Beef and veal	100.9	100.2	102.8	104.5	98.4	99.2	103.7	99.9	99.5	100.8
Pork	101.4	120.9	123.1	132.3	93.0	96.1	103.8	111.2	100.8	104.8
Processed poultry	114.3	119.8	117.4	119.4	116.8	117.2	115.7	119.6	124.9	127.3
Unprocessed and packaged fish	170.9	165.9	178.1	166.8	187.2	185.8	189.7	178.3	180.0	180.4
Dairy products	119.7	130.4	128.1	126.0	132.2	131.4	131.5	132.8	135.3	139.4
Processed fruits and vegetables	122.4	127.6	126.4	125.9	125.2	125.3	126.0	125.8	126.4	126.5
Shortening and cooking oil	142.5	138.5	137.8	135.8	140.0	142.6	143.0	141.8	141.5	137.3
Soft drinks	133.1	134.0	133.2	133.0	135.2	135.3	134.0	134.5	134.7	134.8
Finished consumer goods less foods	123.9	127.6	128.2	128.1	125.6	126.0	126.4	126.8	127.0	126.4
Alcoholic beverages	128.5	132.8	135.1	135.8	135.0	135.0	134.6	134.9	134.9	134.9
Apparel	124.2	125.1	125.7	125.9	126.4	126.5	126.2	126.3	126.0	126.3
Footwear	139.2	141.6	143.7	144.3	144.7	144.7	144.4	144.7	144.4	145.0
Tobacco products	231.3	237.4	248.9	247.8	262.0	271.0	278.4	278.7	278.7	286.4
Intermediate materials ³	124.9	125.8	125.6	125.8	123.3	123.3	123.4	123.4	123.4	123.1
Materials for food manufacturing	119.5	125.3	123.2	122.9	121.0	121.7	123.7	122.9	122.6	123.3
Flour	122.8	136.8	118.7	116.3	114.2	112.7	112.1	109.0	107.8	104.0
Refined sugar ⁴	119.4	123.7	123.6	123.1	120.7	119.5	120.8	122.3	120.3	119.9
Crude vegetable oils	129.8	118.1	116.6	110.6	134.9	138.9	143.4	130.6	126.3	120.4
Crude materials ⁵	102.7	113.8	111.1	107.5	99.4	100.3	100.2	98.5	97.1	94.6
Foodstuffs and feedstuffs	105.8	121.5	112.2	111.6	106.3	105.8	106.2	105.6	103.8	103.0
Fruits and vegetables and nuts ⁶	108.4	122.5	115.5	109.0	121.7	128.4	114.6	109.4	119.0	108.0
Grains	112.6	151.1	111.2	106.3	107.2	99.8	98.7	93.8	91.4	82.8
Slaughter livestock	92.8	95.2	96.3	97.9	85.4	87.9	90.7	90.7	81.8	82.1
Slaughter poultry, live	125.6	140.5	131.0	147.9	125.3	128.5	131.1	140.5	156.7	167.8
Plant and animal fibers	155.3	129.4	117.0	121.1	110.1	101.5	107.9	117.9	120.9	115.8
Fluid milk	93.7	107.9	97.5	93.7	103.0	101.4	98.1	100.5	107.0	114.2
Oilseeds	112.6	139.4	140.8	133.9	123.4	118.1	121.0	115.9	120.5	104.6
Leaf tobacco	78.9	89.4	--	94.1	106.7	99.6	--	--	--	93.8
Raw cane sugar	119.7	118.6	116.8	118.4	115.8	117.5	118.0	118.1	119.3	118.4

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			1997		1998				
	1995	1996	1997	Jul	Feb	Mar	Apr	May	Jun	Jul
Market basket¹										
Retail cost (1982-84=100)	149.4	155.9	159.7	159.0	161.6	162.0	161.8	162.7	162.2	162.6
Farm value (1982-84=100)	102.7	111.1	106.2	105.2	102.1	102.7	103.8	103.7	103.3	103.7
Farm-retail spread (1982-84=100)	174.6	180.1	188.6	187.9	193.6	193.9	193.0	194.5	193.9	194.3
Farm value-retail cost (%)	24.1	24.9	23.3	23.2	22.1	22.2	22.5	22.3	22.3	22.3
Meat products										
Retail cost (1982-84=100)	135.5	140.1	144.4	144.6	142.4	142.2	140.8	141.0	141.5	141.8
Farm value (1982-84=100)	93.8	100.4	101.2	103.9	88.0	85.2	86.9	91.4	93.4	89.1
Farm-retail spread (1982-84=100)	178.2	180.9	188.6	186.4	198.2	200.7	196.1	191.9	190.9	195.9
Farm value-retail cost (%)	35.1	36.3	35.5	36.4	31.3	30.3	31.3	32.8	33.4	31.8
Dairy products										
Retail cost (1982-84=100)	132.8	142.1	145.5	143.3	147.7	148.4	148.5	148.1	148.1	148.2
Farm value (1982-84=100)	92.2	107.2	98.0	93.0	107.7	107.2	106.1	105.6	103.5	104.2
Farm-retail spread (1982-84=100)	170.3	174.3	189.3	189.7	184.6	186.4	187.6	187.3	189.2	188.8
Farm value-retail cost (%)	33.3	36.2	32.3	31.1	35.0	34.7	34.3	34.2	33.5	33.7
Poultry										
Retail cost (1982-84=100)	143.5	152.4	156.6	157.9	155.3	155.1	154.3	155.6	155.5	156.6
Farm value (1982-84=100)	113.7	126.2	120.6	128.6	109.7	112.2	116.2	117.2	126.6	135.3
Farm-retail spread (1982-84=100)	177.7	182.6	198.1	191.7	207.8	204.6	198.1	199.9	188.8	181.2
Farm value-retail cost (%)	42.4	44.3	41.2	43.6	37.8	38.7	40.3	40.3	43.6	46.2
Eggs										
Retail cost (1982-84=100)	120.5	142.1	140.0	132.9	147.7	141.0	139.1	128.6	126.3	127.5
Farm value (1982-84=100)	91.1	114.7	99.3	90.2	137.3	136.4	85.2	67.0	77.2	74.2
Farm-retail spread (1982-84=100)	173.2	191.4	213.0	209.6	255.3	218.0	235.8	239.2	214.6	223.2
Farm value-retail cost (%)	48.6	51.9	45.6	43.6	38.2	44.7	39.4	33.5	39.2	37.4
Cereal and bakery products										
Retail cost (1982-84=100)	167.5	174.0	177.6	178.3	179.7	179.6	180.2	180.5	181.6	181.8
Farm value (1982-84=100)	110.1	125.6	107.7	100.6	101.0	102.0	100.3	98.2	93.7	89.6
Farm-retail spread (1982-84=100)	175.5	180.7	187.4	189.1	190.7	190.4	191.4	192.0	193.9	194.7
Farm value-retail cost (%)	8.1	7.2	7.4	6.9	6.9	7.0	6.8	6.7	6.3	6.0
Fresh fruit										
Retail cost (1982-84=100)	226.9	243.0	245.1	237.8	249.6	245.6	249.9	258.8	256.6	255.7
Farm value (1982-84=100)	136.2	151.7	137.0	121.9	137.4	136.7	136.6	134.1	133.8	128.1
Farm-retail spread (1982-84=100)	268.7	285.2	295.0	291.3	301.4	295.9	302.2	316.4	313.3	314.6
Farm value-retail cost (%)	19.0	19.7	17.7	16.2	17.4	17.6	17.3	16.4	16.5	15.8
Fresh vegetables										
Retail cost (1982-84=100)	193.1	189.2	194.6	190.3	210.5	220.2	219.7	229.7	214.7	214.0
Farm value (1982-84=100)	130.1	113.3	118.7	118.9	125.2	137.3	147.8	134.5	105.5	141.5
Farm-retail spread (1982-84=100)	225.5	228.3	233.6	227.0	254.4	262.8	256.6	278.7	270.9	251.3
Farm value-retail cost (%)	22.9	20.3	20.7	21.2	20.2	21.2	22.8	19.9	16.7	22.5
Processed fruits and vegetables										
Retail cost (1982-84=100)	137.5	144.4	147.9	148.8	148.5	149.7	148.7	150.7	150.6	151.6
Farm value (1982-84=100)	120.5	121.5	115.9	115.8	117.2	117.2	117.2	116.7	120.6	116.8
Farm-retail spread (1982-84=100)	142.8	151.6	157.9	159.1	158.3	159.8	158.5	161.3	160.0	162.5
Farm value-retail cost (%)	20.8	20.0	18.6	18.5	18.8	18.6	18.7	18.4	19.0	18.3
Fats and oils										
Retail cost (1982-84=100)	137.3	140.5	141.7	141.4	141.5	142.2	140.7	141.2	143.3	147.6
Farm value (1982-84=100)	121.3	112.3	109.4	105.2	120.3	122.9	126.9	128.1	119.6	114.9
Farm-retail spread (1982-84=100)	143.1	150.9	153.6	154.7	149.3	149.3	145.8	146.0	152.0	159.6
Farm value-retail cost (%)	23.8	21.5	20.8	20.0	22.9	23.2	24.3	24.4	22.5	20.9

See footnotes at end of table, next page.

Table 8—Farm-Retail Price Spreads (continued)

	Annual			1997			1998			
	1995	1996	1997	Aug	Mar	Apr	May	Jun	Jul	Aug
Beef, All Fresh Retail Price (cts/lb)	259.4	252.4	253.8	254.6	256.3	255.4	254.4	251.7	252.2	254.4
Beef, Choice										
Retail price (cents/lb.) ²	284.4	280.2	279.5	281.0	273.1	278.2	277.4	278.7	278.5	279.4
Wholesale value (cents) ³	163.9	158.1	158.2	161.2	147.0	151.6	157.0	154.5	154.0	160.6
Net farm value (cents) ⁴	138.4	134.9	137.2	138.0	129.9	136.4	137.1	134.8	128.6	126.1
Farm-retail spread (cents)	146.0	145.3	142.3	143.0	143.2	141.8	140.3	143.9	149.9	153.3
Wholesale-retail (cents) ⁵	120.5	122.1	121.3	119.8	126.1	126.6	120.4	124.2	124.5	118.8
Farm-wholesale (cents) ⁶	25.5	23.2	21.0	23.2	17.1	15.2	19.9	19.7	25.4	34.5
Farm value-retail price (%)	49	48	49	49	48	49	49	48	46	45
Pork										
Retail price (cents/lb.) ²	194.8	220.9	231.5	236.0	229.8	225.0	226.7	228.9	231.0	230.9
Wholesale value (cents) ³	98.8	117.2	117.1	123.3	91.4	91.0	99.8	98.0	94.9	96.4
Net farm value (cents) ⁴	66.7	84.6	81.1	85.1	54.3	55.7	66.3	65.8	57.6	55.4
Farm-retail spread (cents)	128.1	136.3	150.4	150.9	175.5	169.3	160.4	163.1	173.4	175.5
Wholesale-retail (cents) ⁵	96.0	103.7	114.4	112.7	138.4	134.0	126.9	130.9	136.1	134.5
Farm-wholesale (cents) ⁶	32.1	32.6	36.0	38.2	37.1	35.3	33.5	32.2	37.3	41.0
Farm value-retail price (%)	34	38	35	36	24	25	29	29	25	24

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 price and farm value, represents charges for assembling, processing, transporting, distributing. 2. Weighted-average price of retail cuts from pork and Choice yield grade 3 beef. Prices from BLS. 3. Value of wholesale (boxed beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs and by-product values. 4. Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of by-products. 5. Charges for retailing and other marketing services such as wholesaling, and in-city transportation. 6. Charges for livestock marketing, processing, and transportation. *Information contact: Veronica Jones (202) 694-5387, Larry Duewer (202) 694-5172*

Table 9—Price Indexes of Food Marketing Costs

	Annual			1996	1997				1998	
	1995	1996	1997	IV	I	II	III	IV	I	II
	1987=100*									
Laboróhourly earnings										
and benefits	455.2	459.7	474.3	465.3	469.3	473.0	474.6	480.2	484.9	488.3
Processing	472.5	474.7	486.0	480.2	481.4	484.9	487.1	490.5	493.8	497.7
Wholesaling	502.2	516.0	536.2	520.5	526.2	534.1	538.9	545.4	546.8	552.5
Retailing	417.1	419.9	435.2	426.1	432.1	434.1	433.6	441.1	448.7	450.6
Packaging and containers	415.7	399.8	390.3	393.1	392.1	388.7	387.6	392.9	398.5	396.7
Paperboard boxes and containers	392.1	363.8	341.9	348.9	347.2	335.4	334.7	350.3	365.4	368.7
Metal cans	504.9	498.3	491.0	481.8	489.4	496.1	490.8	487.9	494.1	484.7
Paper bags and related products	457.8	437.8	441.9	443.3	443.8	441.6	439.5	442.5	438.8	434.0
Plastic films and bottles	330.6	326.5	326.6	331.9	326.6	325.3	326.9	327.5	326.7	325.0
Glass containers	463.3	460.5	447.4	459.3	449.3	446.9	446.6	446.6	446.9	446.9
Metal foil	263.1	235.7	233.4	229.9	228.2	232.0	237.2	236.4	232.2	232.2
Transportation services	436.6	429.8	430.0	430.2	431.0	430.6	429.0	429.4	429.9	431.8
Advertising	539.1	580.1	609.4	582.8	608.1	608.7	609.3	611.6	623.2	624.2
Fuel and power	633.7	670.7	668.5	699.2	689.5	657.4	658.1	669.0	625.1	622.9
Electric	511.3	501.3	499.2	492.6	488.5	499.0	517.7	491.5	482.2	489.3
Petroleum	559.7	666.8	616.7	745.5	672.8	609.7	574.8	609.6	495.5	470.0
Natural gas	1,091.7	1,136.7	1,214.0	1,180.9	1,261.1	1,165.7	1,179.7	1,249.4	1,229.4	1,242.1
Communications, water and sewage	284.9	296.8	302.8	299.1	301.1	302.2	303.5	304.2	305.5	308.0
Rent	269.0	268.2	265.6	268.3	266.6	265.6	265.1	265.1	262.5	260.3
Maintenance and repair	486.1	499.6	514.9	506.2	509.6	513.0	517.3	519.7	524.1	527.1
Business services	491.0	501.7	512.3	506.6	509.5	511.7	513.9	514.1	518.4	521.2
Supplies	342.7	338.3	337.8	339.0	338.8	337.0	337.5	337.9	335.6	332.4
Property taxes and insurance	546.8	564.3	580.1	570.4	573.6	577.3	582.2	587.3	591.1	595.4
Interest, short-term	113.5	103.9	108.9	104.2	105.3	111.2	108.8	110.1	106.5	106.7
Total marketing cost index	444.8	452.1	459.9	455.6	458.6	458.4	459.1	463.4	465.3	466.9

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

Livestock & Products

Table 10—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion ¹	Imports	Total supply	Exports	Ending stocks	Consumption		Conversion factor ³	Primary market price ⁴
							Total	Per capita ²		
				<i>Million lbs. ⁵</i>				<i>lbs.</i>		<i>\$/cwt</i>
Beef										
1995	548	25,222	2,103	27,873	1,821	519	25,533	67	0.695	66
1996	519	25,525	2,073	28,117	1,877	377	25,863	68	0.700	65
1997	377	25,490	2,343	28,210	2,136	465	25,609	67	0.700	66
1998	465	25,759	2,536	28,760	2,110	400	26,250	68	0.700	62-63
1999	400	24,006	2,760	27,166	2,155	350	24,661	63	0.700	69-75
Pork										
1995	438	17,849	664	18,951	787	396	17,768	52	0.776	42
1996	396	17,117	618	18,131	970	366	16,795	49	0.776	53
1997	366	17,274	633	18,273	1,044	408	16,821	49	0.776	51
1998	408	18,822	640	19,870	1,245	475	18,150	52	0.776	33-34
1999	475	19,580	700	20,755	1,300	490	18,965	54	0.776	32-35
Veal⁶										
1995	7	319	0	326	0	7	319	1	0.83	75
1996	7	378	0	385	0	7	378	1	0.83	59
1997	7	334	0	341	0	8	333	1	0.83	82
1998	8	267	0	275	0	6	269	1	0.83	83
1999	6	255	0	261	0	6	255	1	0.83	94
Lamb and mutton										
1995	11	287	64	362	6	8	348	1	0.89	76
1996	8	268	73	349	6	9	334	1	0.89	85
1997	9	260	83	352	5	14	333	1	0.89	88
1998	14	241	96	351	7	11	333	1	0.89	78
1999	11	223	85	319	8	11	300	1	0.89	77
Total red meat										
1995	1,004	43,677	2,831	47,512	2,614	930	43,968	122	--	--
1996	930	43,288	2,764	46,982	2,853	759	43,370	120	--	--
1997	759	43,358	3,059	47,176	3,185	895	43,096	118	--	--
1998	895	45,089	3,272	49,256	3,362	892	45,002	122	--	--
1999	892	44,064	3,545	48,501	3,463	857	44,181	119	--	--
<i>¢/lb</i>										
Broilers										
1995	458	24,827	1	25,287	3,894	560	20,832	69	0.869	56
1996	560	26,124	4	26,688	4,420	641	21,626	71	0.869	61
1997	641	27,041	5	27,687	4,664	607	22,416	73	0.869	59
1998	607	27,558	5	28,169	5,008	600	22,561	72	0.869	62-63
1999	600	28,943	4	29,547	5,025	650	23,872	76	0.869	56-61
Mature chickens										
1995	14	496	3	513	99	7	406	2	1.0	--
1996	7	491	0	498	265	6	228	1	1.0	--
1997	6	510	0	516	384	7	125	1	1.0	--
1998	7	520	0	527	435	7	85	1	1.0	--
1999	7	546	0	554	412	5	137	1	1.0	--
Turkeys										
1995	254	5,069	2	5,326	348	271	4,706	18	1.0	66
1996	271	5,401	1	5,673	438	328	4,906	19	1.0	66
1997	328	5,412	1	5,741	598	415	4,727	18	1.0	65
1998	415	5,246	1	5,663	461	400	4,801	18	1.0	60-61
1999	400	5,235	1	5,636	500	400	4,735	17	1.0	60-64
Total poultry										
1995	727	30,393	6	31,125	4,342	839	25,944	88	--	--
1996	839	32,015	5	32,859	5,123	975	26,760	90	--	--
1997	975	32,964	6	33,944	5,646	1,029	27,269	91	--	--
1998	1,029	33,324	6	34,359	5,904	1,007	27,447	91	--	--
1999	1,007	34,724	5	35,736	5,937	1,055	28,743	94	--	--
Red meat and poultry										
1995	1,731	74,070	2,837	78,637	6,956	1,769	69,912	210	--	--
1996	1,769	75,303	2,769	79,841	7,976	1,734	70,130	210	--	--
1997	1,734	76,322	3,065	81,120	8,831	1,924	70,364	209	--	--
1998	1,924	78,413	3,278	83,615	9,266	1,899	72,449	213	--	--
1999	1,899	78,788	3,550	84,237	9,400	1,912	72,924	213	--	--

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

Table 11—U.S. Egg Supply & Use

	Beg. stocks	Production	Imports	Total supply	Exports	Hatching use	Ending stocks	Consumption		Primary market price*
								Total	Per capita	
	Million doz.							No.	¢/doz.	
1992	13.0	5,905.0	4.3	5,922.3	157.0	732.0	13.5	5,019.8	235.9	65.4
1993	13.5	6,005.8	4.7	6,023.9	158.9	769.6	10.7	5,084.6	236.4	72.5
1994	10.7	6,177.6	3.7	6,192.0	187.6	805.4	14.9	5,184.1	238.7	67.3
1995	14.9	6,215.6	4.1	6,234.6	208.9	847.2	11.2	5,167.3	235.6	72.9
1996	11.2	6,371.3	5.4	6,387.9	253.1	863.8	8.5	5,262.4	237.8	88.2
1997	8.5	6,459.8	6.9	6,475.2	227.8	894.8	7.4	5,345.2	239.4	81.2
1998	7.4	6,622.3	5.9	6,635.6	226.2	921.1	10.0	5,478.3	243.2	76.0
1999	10.0	6,765.0	4.0	6,779.0	243.0	970.0	10.0	5,556.0	244.5	72.5

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 & Use¹

		Commercial				Total commer- cial supply	Commercial				CCC net removals	
	Farm use	Farm Market- ings	Beg. stocks	Imports	CCC net re- movals		Ending stocks	Disap- pear- ance	All milk price ¹	Skim solids basis	Total solid basis ²	
Production												
Billion lbs. (milkfat basis)										\$/cwt	Billion lbs.	
1991	147.7	2.0	145.7	5.1	2.6	153.4	10.4	4.5	138.6	12.24	3.9	6.5
1992	150.9	1.9	149.0	4.5	2.5	155.9	9.9	4.7	141.3	13.09	2.0	5.2
1993	150.6	1.8	148.8	4.7	2.8	156.2	6.7	4.6	145.0	12.80	3.9	5.0
1994	153.7	1.7	152.0	4.6	2.9	159.4	4.8	4.3	150.3	12.97	3.7	4.2
1995	155.4	1.6	153.9	4.3	2.9	161.1	2.1	4.1	154.9	12.74	4.4	3.5
1996	154.3	1.5	153.8	4.1	2.9	159.8	0.1	4.7	155.0	14.74	0.7	0.5
1997	156.6	1.4	155.2	4.7	2.7	162.6	1.1	4.9	156.6	13.34	3.7	2.7
1998	157.8	1.4	156.4	4.9	3.5	164.8	0.4	4.8	159.5	15.00	4.2	2.7
1999	160.1	1.3	158.8	4.8	3.3	166.8	0.8	4.9	161.1	13.85	3.6	2.5

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			1997			1998				
	1995	1996	1997	Jul	Feb	Mar	Apr	May	Jun	Jul	
Broilers											
Federally inspected slaughter certified (mil. lb.)	25,020.8	26,336.3	27,270.7	2,307.3	2,144.9	2,331.9	2,384.0	2,258.1	2,335.3	2343.8	
Wholesale price, 12-city (cents/lb.)	56.2	61.2	58.8	63.0	56.4	58.1	58.8	60.1	64.3	68.5	
Price of grower feed (\$/ton) ¹	135.1	175.5	157.8	157.0	143.0	141.0	138.0	137.0	134	131.0	
Broiler-feed price ratio ²	5.1	4.4	4.7	5.1	4.8	5.0	5.3	5.4	6.0	6.6	
Stocks beginning of period (mil. lb.)	458.4	560.1	641.3	703.3	616.1	629.5	665.8	710.3	654.7	583.5	
Broiler-type chicks hatched (mil.)	7,932.4	8,076.9	8,306.5	710.7	644.5	732.0	709.4	740.0	719.0	723.4	
Turkeys											
Federally inspected slaughter certified (mil. lb.)	5,128.8	5,465.6	5,477.9	491.8	410.9	445.5	442.3	421.2	457.9	459.1	
Wholesale price, Eastern U.S. 8-16 lb. young hens (cents/lb.)	66.4	66.5	64.9	68.6	54.0	55.5	58.1	58.7	60.6	61.4	
Price of turkey grower feed (\$/ton) ¹	130.1	166.1	142.5	137.0	131.0	128.0	125.0	122.0	118.0	115.0	
Turkey-feed price ratio ²	6.3	5.3	5.6	6.0	5.2	5.4	5.7	5.8	6.1	6.5	
Stocks beginning of period (mil. lb.)	254.4	271.3	328.0	667.8	497.6	512.7	527.0	580.2	612.9	656.5	
Poultz placed in U.S. (mil.)	321.7	327.2	321.5	30.1	25.1	26.4	25.7	25.7	27.0	26.2	
Eggs											
Farm production (mil.)	74,587	76,456	77,515	6,443	6,071	6,829	6,571	6,630	6,423	6,680	
Average number of layers (mil.)	294	298	303	299	312	313	311	308	308	308	
Rate of lay (eggs per layer on farms)	253.8	256.2	255.2	21.6	19.5	21.8	21.1	21.5	20.9	21.7	
Cartoned price, New York, grade A large (cents/doz.) ³	72.9	88.2	81.2	81.9	72.4	81.4	71.6	60.4	67.3	73.3	
Price of laying feed (\$/ton) ¹	149.7	184.4	159.8	160.0	156.0	149.0	149.0	161.0	150.0	148.0	
Egg-feed price ratio ²	8.6	8.5	8.8	8.2	8.3	9.4	8.5	6.8	8.0	7.9	
Stocks, first of month											
Frozen (mil. doz.)	14.8	10.5	7.7	6.3	9.1	9.3	7.9	7.0	9.8	7.7	
Replacement chicks hatched (mil.)	397	407	422	33.8	34.6	40.0	39.9	39.6	39.2	36.6	

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

Information contact: LaVerne Williams (202) 694-5190

Table 14—Dairy

	Annual			1997			1998			
	1995	1996	1997	Jul	Feb	Mar	Apr	May	Jun	Jul
Milk--Basic Formula Price (\$/cwt) ¹	11.83	13.39	12.05	10.86	13.32	12.81	12.01	10.88	13.10	14.77
Wholesale prices										
Butter, Central States (cents/lb.) ²	81.9	108.2	116.2	110.8	139.8	134.1	136.4	153.2	186.7	203.1
Am. cheese, Wis. assembly pt. (cents/lb.)	132.8	149.1	132.4	123.3	144.7	138.8	129.7	123.0	151.3	162.6
Nonfat dry milk (cents/lb.) ³	108.6	122.2	110.0	107.6	105.2	104.7	104.3	103.5	103.0	103.0
USDA net removals										
Total (mil. lb.) ⁴	2,105.7	86.9	1,108.6	125.5	76.0	53.0	38.7	32.1	12.3	19.0
Butter (mil. lb.)	78.5	0.1	39.2	4.7	2.2	1.3	1.0	0.7	0.0	0.0
Am. cheese (mil. lb.)	6.1	4.6	11.3	1.6	0.7	0.6	0.7	0.6	0.6	0.7
Nonfat dry milk (Mil. lb.)	343.8	57.2	296.7	23.2	31.8	24.7	27.8	39.1	27.7	54.8
Milk										
Milk prod. 20 states (mil. lb.)	131,780	131,343	133,861	11,437	10,434	11,722	11,591	12,067	11,546	11,345
Milk per cow (lb.)	16,762	16,800	17,252	1,473	1,351	1,517	1,499	1,557	1,476	1,464
Number of milk cows (1,000)	7,862	7,818	7,759	7,765	7,726	7,725	7,735	7,750	7,753	7,750
U.S. milk production (mil. lb.) ⁵	155,424	154,259	156,602	13,324	12,222	13,726	13,509	14,058	13,330	13,157
Stocks, beginning ⁴										
Total (mil. lb.)	5,760	4,168	4,714	7,552	5,322	5,656	6,009	6,488	6,689	6,664
Commercial (mil. lb.)	4,263	4,099	4,704	7,532	5,306	5,640	5,990	6,460	6,663	6,637
Government (mil. lb.)	1,497	69	10	21	15	16	20	28	26	27
Imports, total (mil. lb.) ⁴	2,936	2,911	2,698	206	215	310	279	297	326	--
Commercial disappearance (mil. lb.) ⁴	154,843	154,985	156,578	13,460	11,923	13,519	13,168	14,005	13,559	--
Butter										
Production (mil. lb.)	1,264.5	1,174.5	1,151.2	80.0	102.7	100.8	103.0	92.9	72.6	67.0
Stocks, beginning (mil. lb.)	79.4	18.6	13.7	93.7	34.2	44.2	55.9	67.4	72.7	60.5
Commercial disappearance (mil. lb.)	1,186.3	1,179.8	1,107.9	83.5	91.4	89.1	91.8	87.6	87.2	--
American cheese										
Production (mil. lb.)	3,131.4	3,280.8	3,285.2	285.3	261.1	285.2	289.7	293.1	287.8	277.8
Stocks, beginning (mil. lb.)	310.4	307.0	379.9	464.9	412.1	411.2	421.5	442.2	443.2	450.1
Commercial disappearance (mil. lb.)	3,148.5	3,230.1	3,268.6	280.3	263.1	275.8	272.3	295.1	282.9	--
Other cheese										
Production (mil. lb.)	3,785.5	3,936.7	4,043.8	327.9	313.0	360.0	351.6	360.0	353.3	334.3
Stocks, beginning (mil. lb.)	126.8	105.3	107.3	140.4	81.7	98.8	98.2	103.1	108.8	133.6
Commercial disappearance (mil. lb.)	4,125.6	4,243.0	4,365.5	355.4	312.5	383.9	368.1	377.9	352.2	--
Nonfat dry milk										
Production (mil. lb.)	1,233.0	1,061.8	1,271.6	111.7	97.0	107.3	120.4	121.3	104.2	90.0
Stocks, beginning (mil. lb.)	131.2	85.0	71.4	173.4	128.1	131.2	128.9	161.2	186.8	198.2
Commercial disappearance (mil. lb.)	923.7	1,009.0	895.4	103.3	64.0	96.7	73.4	64.2	82.3	--
Frozen dessert										
Production (mil. gal.) ⁶	1,229.6	1,240.9	1,281.4	132.0	91.7	109.4	115.4	118.9	132.2	131.3

-- = Not available. Quarterly values for latest year are preliminary. 1. Manufacturing grade milk. 2. Grade AA Chicago before June 1998. 3. Prices paid f.o.b. Central States production area. 4. Milk equivalent, fat basis. 5. Monthly data ERS estimates. 6. Hard ice cream, ice milk, and hard sherbet.

Information contact: LaVerne Williams (202) 694-5190

Table 15—Wool

	Annual			1996			1997				1998	
	1995	1996	1997	IV	I	II	III	IV	I	II		
U.S. wool price (¢/lb.) ¹	258	193	238	191	196	244	255	258	209	178		
Imported wool price (¢/lb.) ²	249	196	206	191	196	210	213	204	192	176		
U.S. mill consumption, scoured												
Apparel wool (1,000 lb.)	129,299	129,525	130,386	23,092	33,124	33,830	30,638	32,794	29,208	29,591		
Carpet wool (1,000 lb.)	12,667	12,311	13,576	3,111	3,437	3,324	3,395	3,420	3,549	3,729		

1. Wool price delivered at U.S. mills, clean basis, Graded Territory 64is (20.60-22.04 microns) staple 2-3/4" and up. 2. Wool price, Charleston, SC warehouse, clean basis, Australian 60/62is, type 64A (24 micron). Duty since 1982 has been 10 cents.

Information contact: Mae Dean Johnson (202) 694-5299

Table 16—Meat Animals

	Annual			1997			1998			
	1995	1996	1997	Aug	Mar	Apr	May	Jun	Jul	Aug
Cattle on feed (7 states, 1000+ head capacity)										
Number on feed (1,000 head) ¹	8,031	8,667	8,943	8,770	8,835	8,607	8,295	8,289	7,825	8,985
Placed on feed (1,000 head)	20,034	19,564	20,765	2,429	1,421	1,358	1,740	1,314	1,677	2,031
Marketings (1,000 head)	18,753	18,636	19,552	2,033	1,580	1,609	1,681	1,727	1,755	1,942
Other disappearance (1,000 head)	674	652	701	45	69	61	65	51	41	52
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, 1,100-1,300 lb.										
Texas	66.69	65.06	65.99	65.19	62.05	64.52	64.52	63.85	60.28	58.75
Neb. direct	66.26	65.05	66.32	65.96	61.89	64.68	64.40	63.26	59.97	58.65
Boning utility cows, Sioux Falls	35.58	30.33	34.27	35.44	38.19	38.44	39.30	39.61	36.11	36.06
Feeder steers										
Medium no. 1, Oklahoma City										
600-650 lb.	70.49	61.31	81.34	85.00	85.65	86.20	85.86	77.40	72.96	72.24
750-800 lb.	68.03	61.08	76.19	80.53	73.95	74.96	73.95	73.10	69.13	68.75
Slaughter hogs										
Barrows and gilts, 230-250 lb.										
Iowa, S. Minn.	42.35	53.39	51.36	54.70	33.97	34.44	42.00	41.57	35.91	34.86
5 markets	41.99	53.42	51.30	54.06	34.29	35.12	41.74	41.40	41.40	34.62
Sows, 5 markets	32.62	44.61	44.51	46.06	28.17	28.19	30.37	30.54	26.77	23.39
Slaughter sheep and lambs										
Lambs, Choice, San Angelo	75.86	85.27	87.95	89.50	70.30	71.50	73.00	91.21	82.21	82.05
Ewes, Good, San Angelo	33.91	39.05	49.33	51.38	50.95	43.38	35.13	37.88	36.21	35.55
Feeder lambs										
Choice, San Angelo	81.08	94.88	104.43	100.94	82.80	76.00	76.56	88.00	76.43	78.80
Wholesale meat prices, Midwest										
Boxed beef cut-out value										
Choice, 700-800 lb.	106.09	102.01	102.75	104.49	94.04	97.61	101.49	99.58	98.46	102.16
Select, 700-800 lb.	98.45	95.34	96.15	96.39	91.97	96.23	92.24	94.71	90.41	90.65
Canner and cutter cow beef	68.67	58.18	64.50	68.46	64.08	65.60	66.58	63.50	62.83	62.13
Pork cutout	--	--	--	--	53.41	54.25	63.94	62.45	57.10	57.62
Pork loins, bone-in, 1/4 " trim, 14-19 lb.	126.99	138.73	128.75	119.28	104.56	102.51	130.64	113.13	106.51	105.90
Pork bellies, 12-14 lb.	43.04	69.96	73.91	85.43	42.28	54.65	57.87	63.10	68.46	72.99
Hams, bone-in, trimmed, 20-27 lb.	--	--	--	--	46.41	42.82	46.62	50.80	--	--
All fresh beef retail price	259.42	252.44	253.72	254.59	256.28	255.38	254.45	251.66	252.22	254.42
Commercial slaughter (1,000 head) ²										
Cattle	35,639	36,583	36,351	3,107	2,894	2,928	2,958	3,109	3,039	--
Steers	18,274	17,819	17,554	1,577	1,380	1,422	1,486	1,599	1,569	--
Heifers	10,399	10,756	11,538	960	997	970	962	967	929	--
Cows	6,281	7,274	6,563	506	470	484	457	488	489	--
Bull and stags	686	728	696	64	47	51	53	55	52	--
Calves	1,430	1,768	1,574	125	127	109	102	116	133	--
Sheep and lambs	4,560	4,184	3,911	301	356	384	281	294	281	--
Hogs	96,326	92,394	91,566	7,349	8,477	8,329	7,572	7,730	8,269	--
Barrows and gilts	91,683	88,224	88,253	7,030	8,152	7,998	7,269	7,391	7,902	--
Commercial production (mil. lb.)										
Beef	25,117	25,421	25,384	2,221	2,081	2,090	2,124	2,249	2,213	--
Veal	307	368	323	25	23	20	19	20	21	--
Lamb and mutton	284	265	257	19	26	25	19	19	18	--
Pork	17,810	17,084	17,245	1,352	1,596	1,566	3,582	1,444	1,529	--
	Annual			1997				1998		
	1995	1996	1997	I	II	III	IV	I	II	III
Hogs and pigs (U.S.) ³										
Inventory (1,000 head) ¹	59,990	58,264	56,141	56,141	55,838	58,263	61,163	60,915	60,070	61,600
Breeding (1,000 head) ¹	7,060	6,839	6,667	6,667	6,842	6,960	6,944	6,986	6,986	7,018
Market (1,000 head) ¹	52,930	51,425	49,474	49,474	48,996	51,303	54,219	53,929	53,084	54,582
Farrowings (1,000 head)	11,847	11,187	11,440	2,702	2,944	2,959	2,929	2,898	3,055	3,034
Pig crop (1,000 head)	98,516	94,956	98,972	23,264	25,471	25,796	25,315	25,164	26,714	--
Cattle on Feed, 7 states (1,000 head) ⁴										
Steers and Steer Calves	5,218	5,588	5,410	5,410	5,417	4,615	5,147	5,803	5,245	4,609
Heifers and Heifer Calves	2,785	3,005	3,455	3,455	3,431	3,026	3,383	3,615	3,325	3,191
Cows and Bulls	30	74	78	78	56	38	28	37	37	26

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

Crops & Products

Table 17—Supply & Utilization^{1,2}

	Area			Yield	Production	Total supply ⁴	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price ⁵
	Set aside ³	Planted	Harvested									
	Mil. Acres		Bu./acre		Mil. bu.						\$/bu.	
Wheat												
1994/95	5.2	70.3	61.8	37.6	2,321	2,981	344	942	1,188	2,475	507	3.45
1995/96	6.1	69.1	60.9	35.8	2,183	2,757	153	987	1,241	2,381	376	4.55
1996/97	--	75.6	62.9	36.3	2,285	2,753	314	995	1,001	2,310	444	4.30
1997/98*	--	71.0	63.6	39.7	2,527	3,065	294	1,007	1,040	2,342	723	3.38
1998/99*	--	65.8	59.2	43.3	2,565	3,378	400	1,018	1,075	2,493	885	2.50-2.80
	Mil. acres		lb./acre		Mil. cwt (rough equiv)						\$/cwt	
Rice ⁶												
1994/95	0.3	3.4	3.3	5,964.0	197.8	230.9	--	100.7	98.9	199.6	31.3	6.78
1995/96	0.5	3.1	3.1	5,621.0	173.9	212.6	--	104.6	83.0	187.6	25.0	9.15
1996/97	--	2.8	2.8	6,121.0	171.3	206.3	--	100.7	78.4	179.1	27.2	9.96
1997/98*	--	3.1	3.0	5,896.0	178.9	215.5	--	101.5	84.0	185.5	30.0	9.64
1998/99*	--	3.2	3.2	5,685.0	181.2	221.2	--	108.9	84.0	192.9	28.3	9.00-10.00
	Mil. acres		Bu./acre		Mil. bu.						\$/bu.	
Corn												
1994/95	2.4	79.2	72.9	138.6	10,103	10,962	5,523	1,704	2,177	9,405	1,558	2.26
1995/96	7.7	71.2	65.0	113.5	7,374	8,948	4,682	1,612	2,228	8,522	426	3.24
1996/97	--	79.5	73.1	127.1	9,293	9,733	5,362	1,692	1,795	8,849	883	2.71
1997/98*	--	80.2	73.7	127.0	9,366	10,259	5,550	1,785	1,525	8,860	1,399	2.45
1998/99*	--	80.8	73.8	132.0	9,738	11,147	5,750	1,850	1,625	9,225	1,922	1.80-2.20
	Mil. acres		Bu./acre		Mil. bu.						\$/bu.	
Sorghum												
1994/95	1.6	9.8	8.9	72.8	649	697	380	22	223	625	72	2.13
1995/96	1.7	9.5	8.3	55.6	460	532	297	19	198	514	18	3.19
1996/97	--	13.2	11.9	67.5	803	821	524	45	205	774	47	2.34
1997/98*	--	10.1	9.4	69.5	653	701	400	55	210	665	36	2.20
1998/99*	--	9.7	7.8	67.5	529	565	275	45	195	515	50	1.65-2.05
	Mil. acres		Bu./acre		Mil. bu.						\$/bu.	
Barley												
1994/95	2.7	7.2	6.7	56.2	375	580	228	173	66	467	113	2.03
1995/96	2.9	6.7	6.3	57.3	360	513	179	172	62	413	100	2.89
1996/97	--	7.1	6.8	58.5	396	532	220	172	31	423	109	2.74
1997/98*	--	6.9	6.4	58.3	374	524	158	172	74	404	120	2.38
1998/99*	--	6.4	6.1	61.3	372	528	210	172	30	412	116	1.75-2.15
	Mil. acres		Bu./acre		Mil. bu.						\$/bu.	
Oats												
1994/95	0.6	6.6	4.0	57.1	229	428	234	92	1	327	101	1.22
1995/96	0.8	6.3	3.0	54.7	162	343	183	92	2	277	66	1.67
1996/97	--	4.7	2.7	57.8	155	319	155	95	3	252	67	1.96
1997/98*	--	5.2	2.9	60.5	176	341	170	95	2	267	74	1.60
1998/99*	--	5.0	2.9	60.4	177	346	175	95	2	272	74	1.00-1.40
	Mil. acres		Bu./acre		Mil. bu.						\$/bu.	
Soybeans ⁷												
1994/95	--	61.7	60.9	41.4	2,517	2,731	153	1,405	838	2,396	335	5.48
1995/96	--	62.6	61.6	35.3	2,177	2,516	112	1,370	851	2,333	183	6.72
1996/97	--	64.2	63.4	37.6	2,382	2,575	126	1,436	882	2,443	131	7.35
1997/98*	--	70.9	69.9	39.0	2,727	2,863	193	1,595	875	2,663	200	6.45
1998/99*	--	72.7	71.6	40.6	2,909	3,115	145	1,625	860	2,630	485	4.65-5.35
	Mil. lbs.				Mil. lbs.						¢/lb.	
Soybean oil												
1994/95	--	--	--	--	15,613	16,733	--	12,916	2,680	15,597	1,137	27.58
1995/96	--	--	--	--	15,240	16,472	--	13,465	992	14,457	2,015	24.75
1996/97	--	--	--	--	15,752	17,821	--	14,263	2,037	16,300	1,520	22.50
1997/98*	--	--	--	--	17,980	19,555	--	15,125	3,025	18,150	1,405	25.75
1998/99*	--	--	--	--	18,280	19,740	--	15,300	2,850	18,150	1,590	25.00-27.00
	1,000 tons				1,000 tons						\$/ton ⁸	
Soybean meal												
1994/95	--	--	--	--	33,270	33,483	--	26,542	6,717	33,260	223	162.6
1995/96	--	--	--	--	32,527	32,826	--	26,611	6,002	32,613	212	236.0
1996/97	--	--	--	--	34,210	34,524	--	27,320	6,994	34,314	210	270.9
1997/98*	--	--	--	--	37,820	38,085	--	28,535	9,350	37,885	200	187.0
1998/99*	--	--	--	--	38,550	38,800	--	29,450	9,100	38,550	250	125-140

See footnotes at end of table, next page

Table 17—Supply & Utilization (continued)

	Area			Yield	Production	Total supply ⁴	Feed & residual	Other domestic use	Exports	Total Use	Ending stocks	Farm price ⁵
	Set aside ³	Planted	Harvested									
	Mil. Acres			Lb./acre								¢/lb.
Cotton ⁹												
1994/95	1.7	13.7	13.3	709	19.7	23.2	--	11.2	9.4	20.6	2.7	72.0
1995/96	0.3	16.9	16.0	537	17.9	21.0	--	10.6	7.7	18.3	2.6	75.4
1996/97	--	14.6	12.9	707	18.9	22.0	--	11.1	6.9	18.0	4.0	69.3
1997/98*	--	13.8	13.3	680	18.8	22.8	--	11.3	7.5	18.8	3.9	64.9
1998/99*	--	12.9	10.6	614	13.6	17.7	--	10.7	4.6	15.3	2.4	--

-- = Not available or not applicable. *September 11, 1998 Supply and Demand Estimates. 1. Marketing year beginning June 1 for wheat, barley, and oats; August 1 for cotton and rice; September 1 for soybeans, corn, and sorghum; October 1 for soybean meal and soybean oil. 2. Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, and 4.59 480-pound bales of cotton. 3. Includes diversion, acreage reduction, 50-92, & 0-92 programs. 0/92 & 50/92 set-aside includes idled acreage and acreage planted to minor oilseeds, sesame, and crambe. 4. Includes imports. 5. Marketing-year weighted average price received by farmers. Does not include an allowance for loans outstanding and government purchases. 6. Residual included in domestic use. 7. Includes seed. 8. Simple average of 48 percent, Decatur. 9. Upland and extra-long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply and use estimates and changes in ending stocks. *Information contacts: Wheat, rice, feed grains,*

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

	Marketing year ¹			1997		1998					
	1995/96	1996/97	1997/98	Jul	Feb	Mar	Apr	May	Jun	Jul	
Wheat, no. 1 HRW, Kansas City (\$/bu.) ²	5.49	4.88	3.71	3.57	3.64	3.61	3.39	3.41	3.16	3.02	
Wheat, DNS, Minneapolis (\$/bu.) ³	5.72	4.96	4.31	4.80	4.15	4.26	4.29	4.24	4.01	3.89	
Rice, S.W. La. (\$/cwt) ⁴	18.90	20.34	18.92	20.50	19.00	18.55	18.38	18.31	18.50	18.50	
Corn, no. 2 yellow, 30-day, Chicago (\$/bu.) ⁵	3.97	2.84	2.62	2.57	2.72	2.71	2.53	2.50	2.44	2.27	
Sorghum, no. 2 yellow, Kansas City (\$/cwt) ⁵	6.66	4.54	4.19	4.18	4.36	4.40	4.10	4.09	4.03	3.74	
Barley, feed, Duluth (\$/bu.)	2.67	2.32	1.90	2.40	1.56	1.51	1.42	--	--	1.23	
Barley, malting Minneapolis (\$/bu.)	3.69	3.18	2.50	1.74	--	--	--	--	--	--	
U.S. cotton price, SLM, 1-1/16 in. (¢/lb.) ⁶	83.00	71.60	67.79	71.83	63.66	67.04	61.88	65.21	73.50	74.18	
Northern Europe prices cotton index (¢/lb.) ⁷	85.60	78.66	72.11	81.47	68.68	68.41	65.08	64.61	68.06	69.36	
U.S. M 1-3/32 in. (¢/lb.) ⁸	94.70	82.86	77.98	83.70	74.50	75.38	71.75	73.06	80.63	81.35	
Soybeans, no. 1 yellow, 30-day Chicago (\$/bu)	6.72	7.38	6.51	6.26	6.75	6.55	6.43	6.42	6.31	6.26	
Soybean oil, crude, Decatur (¢/lb.)	24.75	22.50	24.69	21.89	26.51	27.09	28.10	28.27	25.83	24.88	
Soybean meal, 48% protein, Decatur (\$/ton)	236.00	270.90	276.78	273.56	192.75	174.20	162.50	160.00	168.60	183.40	

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

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

	Target price	Basic loan rate	Findley or announced loan rate ¹	Total deficiency payment rate	Effective base acres ²	Program ³	Flexibility contract payment rate	Acres under contract	Contract payment yields	Partici- pation rate ⁴
	\$/bu.				Mil. acres	Percent of base	\$/bu.	Mil. acres	Bu./cwt	Percent
Wheat										
1994/95	4.00	2.72	2.58	0.61	78.10	0/0/0	--	--	--	87
1995/96	4.00	2.69	2.58	0.00	77.70	0/0/0	--	--	--	85
1996/97	--	--	2.58	--	--	--	0.874	76.7	34.70	99
1997/98	--	--	2.58	--	--	--	0.631	76.7	34.70	--
1998/99 ⁵	--	--	2.58	--	--	--	0.660	76.7	34.70	--
	\$/cwt						\$/cwt			
Rice										
1994/95	10.71	6.50	5.88 ⁶	3.79	4.20	0/0/0	--	--	--	95
1995/96	10.71	6.50	6.50 ⁶	3.22 ⁷	4.20	5/0/0	--	--	--	95
1996/97	--	6.50	--	--	--	--	2.766	4.2	48.27	99
1997/98	--	6.50	--	--	--	--	2.710	4.2	48.17	--
1998/99 ⁵	--	6.50	--	--	--	--	2.930	4.2	48.17	--
	\$/bu.						\$/bu.			
Corn										
1994/95	2.75	1.99	1.89	0.57	81.50	0/0/0	--	--	--	81
1995/96	2.75	1.94	1.89	0.00	81.80	7.5/0/0	--	--	--	82
1996/97	--	--	1.89	--	--	--	0.251	80.7	102.90	98
1997/98	--	--	1.89	--	--	--	0.486	80.9	102.80	--
1998/99 ⁵	--	--	1.89	--	--	--	0.370	80.9	102.60	--
	\$/bu.						\$/bu.			
Sorghum										
1994/95	2.61	1.89	1.80	0.59	13.50	0/0/0	--	--	--	81
1995/96	2.61	1.84	1.80	0.00	13.30	0/0/0	--	--	--	77
1996/97	--	--	1.81	--	--	--	0.323	13.1	57.30	99
1997/98	--	--	1.76	--	--	--	0.544	13.1	57.30	--
1998/99 ⁵	--	--	1.74	--	--	--	0.450	13.1	56.50	--
	\$/bu.						\$/bu.			
Barley										
1994/95	2.36	1.62	1.54	0.52	10.70	0/0/0	--	--	--	84
1995/96	2.36	1.58	1.54	0.00	10.70	0/0/0	--	--	--	82
1996/97	--	--	1.55	--	--	--	0.332	10.5	47.30	99
1997/98	--	--	1.57	--	--	--	0.277	10.5	47.20	--
1998/99 ⁵	--	--	1.56	--	--	--	0.280	10.5	46.70	--
	\$/bu.						\$/bu.			
Oats										
1994/95	1.45	1.02	0.97	0.19	6.80	0/0/0	--	--	--	40
1995/96	1.45	1.00	0.97	0.00	6.50	0/0/0	--	--	--	44
1996/97	--	--	1.03	--	--	--	0.033	6.2	50.80	97
1997/98	--	--	1.11	--	--	--	0.031	6.2	50.80	--
1998/99 ⁵	--	--	1.11	--	--	--	0.030	6.2	50.60	--
	\$/bu.						\$/bu.			
Soybeans ⁸										
1994/95	--	--	4.92	--	--	--	--	--	--	--
1995/96	--	--	4.92	--	--	--	--	--	--	--
1996/97	--	--	4.97	--	--	--	--	--	--	--
1997/98	--	--	5.26	--	--	--	--	--	--	--
1998/99	--	--	5.26	--	--	--	--	--	--	--
	¢/lb.						¢/lb.			
Upland cotton										
1994/95	72.90	50.00	50.00 ⁹	4.60	15.30	11/0/0	--	--	--	89
1995/96	72.90	51.92	51.92 ⁹	0.00 ⁷	15.50	0/0/0	--	--	--	79
1996/97	--	51.92	--	--	--	--	8.882	16.2	610.00	99
1997/98	--	51.92	--	--	--	--	7.625	16.2	608.00	--
1998/99 ⁵	--	51.92	--	--	--	--	7.900	16.2	608.00	--

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

Note: The 1996 Act replaced target prices and deficiency payments with fixed annual payments to producers.

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

Table 20—Fruit

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Citrus ¹										
Production (1,000 tons)	13,186	10,860	11,285	12,452	15,274	14,561	15,799	16,009	17,468	18,160
Per capita consumpt. (lb.) ²	23.6	21.4	19.1	24.4	26.0	25.0	24.1	24.9	27.6	29.3
Noncitrus ³										
Production (1,000 tons)	16,345	15,640	15,740	17,124	16,563	17,341	16,356	16,117	17,656	--
Per capita consumpt. (lb.) ²	72.3	70.7	70.6	74.5	73.1	75.6	73.6	74.1	73.5	--
	1997			1998						
	Aug	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Grower prices										
Apples (¢/pound) ⁴	17.4	23.3	22.3	21.6	21.3	19.2	18.2	16.3	16.1	19.0
Pears (¢/pound) ⁴	17.6	15.3	12.7	13.0	12.2	14.6	18.7	17.7	20.3	22.9
Oranges (\$/box) ⁵	6.93	2.53	2.58	3.53	4.75	5.82	5.68	6.41	5.85	5.37
Grapefruit (\$/box) ⁵	5.78	2.57	1.79	1.61	1.03	1.36	0.42	3.58	3.66	7.25
Stocks, ending										
Fresh apples (mil. lb.)	85	4,423	3,729	2,841	2,277	1,626	1,113	637	322	312
Fresh pears (mil. lb.)	117	337	273	212	125	61	32	4	0	94
Frozen fruits (mil. lb.)	1,029	1,233	1,128	1,009	882	808	764	836	1,040	1,027
Frozen conc.orange juice (mil. single-strength gallons)	641	614	794	828	826	1,010	1,066	999	914	823

-- = 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

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Production 1/										
Total vegetables (1,000 cwt)	467,915	543,435	562,938	565,754	677,975	675,793	762,934	742,595	759,347	752,266
Fresh (1,000 cwt) 2/ 4/	240,249	254,418	254,039	242,733	393,249	377,698	396,671	391,699	408,823	428,171
Processed (tons) 3/ 4/	11,383,320	14,450,860	15,444,970	16,151,030	14,236,320	14,904,750	18,313,150	17,544,780	17,526,190	16,204,740
Mushrooms (1,000 lbs) 5/	667,759	714,992	749,151	746,832	776,357	750,799	782,340	777,870	776,677	808,602
Potatoes (1,000 cwt)	356,438	370,444	402,110	417,622	425,367	428,693	467,054	443,606	498,633	465,537
Sweetpotatoes (1,000 cwt)	10,945	11,358	12,594	11,203	12,005	11,053	13,395	12,906	13,456	13,512
Dry edible beans (1,000 cwt)	19,253	23,729	32,379	33,765	22,615	21,913	29,028	30,812	27,960	29,156
	1997			1998						
	Jul	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Shipments (1,000 cwt)										
Fresh	24,434	19,181	18,377	23,713	18,723	20,292	28,362	28,082	29,181	32,093
Iceberg lettuce	3,558	3,035	2,908	4,089	3,233	3,094	4,125	3,628	3,377	4,020
Tomatoes, all	3,645	2,977	3,776	4,189	3,057	3,647	4,767	3,540	3,031	3,962
Dry-bulb onions	3,253	3,795	3,627	4,075	3,436	2,753	4,009	3,584	3,006	3,254
Others 6/	13,978	9,374	8,066	11,360	8,997	10,798	15,461	17,330	19,767	20,857
Potatoes, all	9,797	13,788	14,067	16,328	11,870	15,619	23,416	14,554	11,965	12,732
Sweetpotatoes	138	363	172	146	180	252	373	213	147	140

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			1996	1997				1998	
	1995	1996	1997	IV	I	II	III	IV	I	II
Sugar										
Production ¹	7,978	7,268	7,418	3,874	2,075	679	576	4,088	2,376	818
Deliveries ¹	9,451	9,633	9,764	2,471	2,215	2,436	2,643	2,469	2,261	2,465
Stocks, ending ¹	2,908	3,195	3,376	2,908	3,901	2,734	1,487	3,195	3,917	2,881
Coffee										
Composite green price										
N.Y. (¢/lb.)	142.18	109.35	146.49	98.82	134.80	172.99	143.29	134.89	144.72	117.83
Imports, green bean										
equiv. (mil. lbs.) ²	2,182	2,494	--	--	--	--	--	--	--	--
	Annual			1997				1998		
	1995	1996	1997	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Tobacco										
Avg. price to grower ³										
Flue-cured (\$/lb.)	1.79	1.83	1.73	--	1.76	--	--	--	--	--
Burley (\$/lb.)	1.85	1.92	1.86	--	1.91	1.92	1.88	1.80	1.76	1.70
Domestic taxable removals										
Cigarettes (bil.)	490.3	486.0	471.4	37.8	35.3	42.2	35.9	37	40	--
Large cigars (mil.) ⁴	2,561.7	3,166.4	3,552.9	276.3	323.4	298.2	260.8	318.7	325.6	--

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

World Agriculture

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

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99 F
	Million units									
Wheat										
Area (hectares)	225.8	231.4	222.5	223.1	222.4	215.5	219.8	231.3	229.9	225.8
Production (metric tons)	533.2	588.0	542.9	562.2	559.4	525.2	538.1	583.3	611.6	596.2
Exports (metric tons) ¹	103.7	101.1	111.1	112.7	101.1	100.0	98.0	100.1	100.0	98.4
Consumption (metric tons) ²	532.7	561.9	555.5	550.2	562.3	548.1	550.8	578.1	587.5	603.7
Ending stocks (metric tons) ³	118.9	145.1	132.5	144.5	141.5	118.6	105.9	111.1	135.2	127.7
Coarse grains										
Area (hectares)	321.9	316.3	321.9	323.8	317.5	323.2	313.6	322.9	315.0	312.5
Production (metric tons)	793.7	828.7	810.5	871.9	799.5	873.2	801.9	908.3	892.0	894.4
Exports (metric tons) ¹	104.7	89.1	95.6	91.9	85.3	98.0	87.9	93.3	88.1	87.3
Consumption (metric tons) ²	817.7	817.1	809.7	843.8	839.2	860.8	840.3	879.3	886.7	886.8
Ending stocks (metric tons) ³	123.2	134.8	135.6	163.6	123.8	136.2	97.9	126.9	132.2	139.8
Rice, milled										
Area (hectares)	146.5	146.6	147.4	146.7	145.5	147.9	148.1	149.8	148.3	149.4
Production (metric tons)	343.9	352.0	354.7	355.8	355.6	364.8	371.2	380.2	385.4	378.7
Exports (metric tons) ¹	11.7	12.1	14.1	14.9	16.4	21.0	19.5	18.9	23.9	20.1
Consumption (metric tons) ²	338.2	347.4	356.4	357.9	358.7	366.9	371.2	379.2	383.7	387.1
Ending stocks (metric tons) ³	54.5	59.1	57.5	55.3	52.2	50.1	50.1	51.2	52.8	44.3
Total grains										
Area (hectares)	694.2	694.3	691.8	693.6	685.4	686.6	681.5	704.0	693.2	687.7
Production (metric tons)	1,670.8	1,768.7	1,708.1	1,789.9	1,714.5	1,763.2	1,711.2	1,871.8	1,889.0	1,869.3
Exports (metric tons) ¹	220.1	202.3	220.8	219.5	202.8	219.0	205.4	212.3	212.0	205.8
Consumption (metric tons) ²	1,688.6	1,726.4	1,721.6	1,751.9	1,760.2	1,775.8	1,762.3	1,836.6	1,857.9	1,877.6
Ending stocks (metric tons) ³	296.6	339.0	325.6	363.4	317.5	304.9	253.9	289.2	320.2	311.8
Oilseeds										
Crush (metric tons)	171.7	176.7	185.1	184.4	190.1	208.1	217.5	218.9	229.6	235.4
Production (metric tons)	212.4	215.7	224.3	227.5	229.4	261.7	258.4	261.1	287.1	290.8
Exports (metric tons)	35.6	33.4	37.6	38.2	38.7	44.1	44.3	49.3	52.9	52.2
Ending stocks (metric tons)	23.7	23.4	21.9	23.6	20.3	27.2	22.1	16.4	22.4	28.6
Meals										
Production (metric tons)	116.8	119.3	125.2	125.2	131.7	142.1	147.4	149.3	155.8	160.7
Exports (metric tons)	39.8	40.7	42.2	40.8	44.9	46.7	49.7	50.3	51.2	54.3
Oils										
Production (metric tons)	57.1	58.1	60.6	61.1	63.7	69.6	73.2	75.4	77.7	80.2
Exports (metric tons)	20.4	20.5	21.3	21.3	24.3	27.1	26.0	28.8	29.4	30.3
Cotton										
Area (hectares)	31.6	33.2	34.8	32.6	30.7	32.2	35.9	33.8	33.5	32.9
Production (bales)	79.7	87.1	95.7	82.5	76.7	85.6	93.0	89.4	91.1	85.3
Exports (bales)	31.3	29.8	28.2	25.6	26.7	28.4	27.8	26.8	26.1	25.7
Consumption (bales)	86.9	85.6	86.0	85.8	85.5	85.6	87.1	88.2	88.4	88.0
Ending stocks (bales)	24.8	26.9	37.0	34.4	26.3	28.3	33.8	37.0	40.5	37.8
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998 F
Red meat ⁴										
Production (metric tons)	112.3	116.9	117.7	117.3	119.3	124.6	130.2	135.5	137.4	140.1
Consumption (metric tons)	110.9	114.8	116.1	115.7	118.3	123.5	128.7	132.8	135.1	138.9
Exports (metric tons) ¹	8.2	7.5	7.5	7.4	7.4	8.1	8.2	8.5	8.6	8.5
Poultry ⁴										
Production (metric tons)	33.1	37.6	39.6	38.0	40.5	43.9	47.7	50.5	52.7	54.8
Consumption (metric tons)	32.6	36.5	38.4	37.0	39.4	42.5	46.2	48.8	50.8	53.0
Exports (metric tons) ¹	1.7	2.4	2.8	2.4	2.8	3.7	4.6	5.3	5.7	5.9
Dairy										
Milk production (metric tons) ⁵	387.4	395.0	377.6	378.4	377.6	378.4	380.8	379.8	381.2	383.4

F = forecast. 1. Excludes intra-EU trade but includes intra-FSU trade. 2. Where stocks data are not available, consumption includes stock changes. 3. Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries. 4. Calendar year data. 1990 data correspond with 1989/90, etc. 5. Data prior to 1989 no longer comparable.

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

U.S. Agricultural Trade

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

	Annual			1997			1998			
	1995	1996	1997	Aug	Mar	Apr	May	Jun	Jul	Aug
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	4.82	5.63	4.35	4.13	3.79	3.55	3.50	3.28	3.21	2.96
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	3.13	4.17	2.98	2.84	2.90	2.72	2.70	2.65	2.56	2.25
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	3.13	3.90	2.89	2.83	2.83	2.68	2.63	2.56	2.51	2.34
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	6.50	7.88	7.94	7.66	6.83	6.68	6.66	6.59	6.57	5.83
Soybean oil, Decatur (¢/lb.)	26.75	23.75	23.33	22.07	27.09	28.10	28.28	25.83	24.88	24.00
Soybean meal, Decatur, (\$/ton)	173.70	246.67	266.70	273.32	174.20	162.51	160.03	168.55	183.45	146.15
Cotton, 7-market avg. spot (¢/lb.)	93.45	77.93	69.62	71.61	67.04	61.88	65.21	73.50	74.18	71.87
Tobacco, avg. price at auction (¢/lb.)	178.79	183.20	182.74	159.97	181.47	169.05	---	---	162.96	159.51
Rice, f.o.b., mill, Houston (\$/cwt)	16.68	19.64	20.88	21.38	19.05	19.00	19.00	19.00	19.00	18.85
Inedible tallow, Chicago (¢/lb.)	19.22	20.13	20.75	19.65	17.58	17.38	20.35	19.63	17.31	17.57
Import commodities										
Coffee, N.Y. spot (\$/lb.)	1.45	1.29	2.05	2.09	1.62	1.57	1.43	1.30	1.20	1.28
Rubber, N.Y. spot (¢/lb.)	82.52	72.88	55.40	51.98	41.70	41.27	42.65	41.26	40.03	38.58
Cocoa beans, N.Y. (\$/lb.)	0.61	0.62	0.69	0.72	0.74	0.75	0.78	0.74	0.73	0.72

Information contact: Mary Teymourian (202) 694-5284 or maryt@econ.ag.gov

Table 25—Trade Balance

	Calendar Year			1997			1998			
	1,997	1998 F	1999 P	Jul	Feb	Mar	Apr	May	Jun	Jul
<i>\$ million</i>										
Exports										
Agricultural	57,245	54,500	52,000	3,998	4,727	4,733	4,249	3,928	3,971	3,884
Nonagricultural	585,977	--	--	47,076	47,035	53,299	48,859	48,774	49,191	44,054
Total ²	643,222	--	--	51,074	51,762	58,032	53,108	52,702	53,162	47,938
Imports										
Agricultural	36,289	38,000	39,500	2,975	3,108	3,453	3,328	2,981	3,099	2,908
Nonagricultural	828,412	--	--	71,386	65,368	74,105	72,059	70,193	73,577	72,818
Total ³	864,701	--	--	74,361	68,476	77,558	75,387	73,174	76,676	75,726
Trade Balance										
Agricultural	20,956	16,500	12,500	1,023	1,619	1,280	921	947	872	976
Nonagricultural	-242,435	--	--	-24,310	-18,333	-20,806	-23,200	-21,419	-24,386	-28,764
Total	-221,479	--	--	-23,287	-16,714	-19,526	-22,279	-20,472	-23,514	-27,788

F = Forecast. P = Projection. -- = Not available. 1. Forecasts based on fiscal year (Oct. 1-Sep. 30). 2. Domestic exports including Department of Defense shipments (F.A.S. Value). 3. Imports for consumption (customs value). Information contact: Mary Fant (202) 694-5272

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

	Annual			1997			1998			
	1995	1996	1997	Jul	Feb P	Mar P	Apr P	May P	Jun P	Jul P
	1990=100									
Total U.S. trade	96.2	100.8	111.9	112.9	116.3	116.7	116.6	115.6	117.3	117.9
Agricultural trade										
U.S. markets	97.3	101.0	109.6	107.6	117.6	117.1	117.3	118.1	120.7	120.3
U.S. competitors	97.4	98.7	109.1	110.5	116.6	116.6	115.9	115.2	117.2	117.5
High-valued products										
U.S. markets	95.2	100.4	108.3	106.0	113.2	113.0	113.7	114.8	117.6	117.7
U.S. competitors	98.4	100.1	111.0	113.4	116.5	116.9	116.5	115.0	116.6	116.6
Corn										
U.S. markets	89.1	96.4	107.1	103.6	116.5	116.3	117.3	118.9	122.5	122.3
U.S. competitors	88.8	90.1	97.4	99.0	100.9	100.8	101.4	100.7	101.4	102.5
Soybeans										
U.S. markets	91.1	96.0	107.9	106.9	118.0	117.8	117.4	117.7	120.7	120.4
U.S. competitors	81.3	80.8	82.2	82.0	84.2	84.3	85.4	85.3	85.4	85.5
Wheat										
U.S. markets	100.4	100.8	105.4	103.4	113.3	112.5	112.8	113.4	114.5	114.5
U.S. competitors	100.8	102.1	109.8	111.0	114.9	114.9	115.3	115.4	117.1	117.3
Vegetables										
U.S. markets	102.2	105.6	112.4	110.5	118.3	117.6	118.4	119.6	122.1	122.6
U.S. competitors	99.1	100.5	112.0	114.3	118.1	117.8	117.3	115.5	117.0	117.1
Red meats										
U.S. markets	84.8	93.3	100.4	96.8	107.2	107.6	108.6	110.3	114.1	113.8
U.S. competitors	96.3	98.0	107.9	109.9	113.6	114.0	114.1	113.2	115.0	114.9
Fruits & fruit juices										
U.S. markets	96.2	101.3	111.3	109.3	116.8	116.4	117.4	118.5	121.2	121.7
U.S. competitors	98.2	98.2	107.2	109.1	113.0	113.2	113.1	111.7	113.3	113.8
Cotton										
U.S. markets	93.6	95.5	105.7	102.2	131.0	128.8	125.1	128.1	133.3	133.3
U.S. competitors	104.6	101.6	103.0	103.4	105.2	105.6	107.0	106.8	107.8	107.7
Poultry										
U.S. markets	107.3	102.8	111.9	110.2	113.6	113.3	113.3	113.9	115.6	115.3
U.S. competitors	93.9	95.7	107.3	109.4	114.4	113.4	112.5	111.0	112.7	112.6

P = preliminary. 1. Real indexes adjust nominal exchange rates to avoid the distortion caused by different levels of inflation among countries.

A higher value means the dollar has appreciated. "Total U.S. Trade" Index uses the Federal Reserve Board Index of trade-weighted value of the U.S. dollar against 10 major countries. Weights are based on relative importance of major U.S. customers and competitors in world markets during 1990-94. Indexes are subject to revision for up to one year due to delayed reporting by some countries. High-value products conform to FAS's definition for consumer-oriented agricultural products. Data are available at <http://mann77.mannlib.cornell.edu/data-sets/international/88021/>. Information contact: Tim Baxter (202) 694-5318 or Andy Jerardo (202) 694-5323

Table 27—U.S. Agricultural Exports & Imports

	Calendar Year			Jul		Calendar Year			Jul	
	1997	1998 F	1999 P	1997	1998	1997	1998 F	1999 P	1997	1998
	1,000 units			\$ million						
EXPORTS										
Animals, live (no.) ¹	1,802	--	--	81	67	566	--	--	31	28
Meats and preps., excl. poultry (mt) ²	1,924	1,600	1,600	166	180	4,597	4,100	4,300	411	386
Dairy products (mt) ¹	125	--	--	10	9	932	900	900	92	70
Poultry meats (mt)	2,585	2,700	2,800	218	225	2,423	--	--	192	208
Fats, oils, and greases (mt)	1,089	1,300	1,100	89	132	562	--	--	46	60
Hides and skins, incl. furskins	--	--	--	--	--	1,651	1,400	1,400	138	101
Cattle hides, whole (no.) ¹	20,113	--	--	1,845	1,601	1,187	--	--	106	77
Mink pelts (no.) ¹	3,763	--	--	246	138	97	--	--	8	4
Grains and feeds (mt) ³	91,061	--	--	6,699	7,154	15,361	14,000	14,000	1,118	1,096
Wheat (mt) ⁴	25,264	25,500	31,500	2,463	2,315	4,095	3,800	4,200	379	311
Wheat flour (mt)	508	500	500	56	34	138	--	--	15	8
Rice (mt)	2,508	3,100	2,700	189	211	932	1,100	1,000	57	71
Feed grains, incl. products (mt) ⁵	49,032	43,800	45,900	2,880	3,588	6,211	5,000	4,700	352	396
Feeds and fodders (mt)	12,352	11,700	11,900	990	890	2,669	2,400	2,300	207	199
Other grain products (mt)	1,397	--	--	121	116	1,316	--	--	107	110
Fruits, nuts, and preps. (mt)	3,896	--	--	349	291	4,235	4,600	4,600	359	337
Fruit juices, incl.										
froz. (1,000 hectoliters) ¹	10,689	--	--	831	1,292	662	--	--	53	66
Vegetables and preps. (mt)	3,402	--	--	336	282	4,152	2,800	2,900	348	328
Tobacco, unmanufactured (mt)	222	--	--	7	9	1,553	1,400	1,400	57	61
Cotton, excl. linters (mt) ⁶	1,568	1,600	1,100	109	124	2,682	2,600	1,700	187	195
Seeds (mt)	1,098	--	--	68	59	884	900	900	43	36
Sugar, cane or beat (mt) ¹	125	--	--	9	13	54	--	--	4	5
Oilseeds and products (mt)	36,665	36,200	35,600	1,215	1,547	12,057	11,300	9,500	513	506
Oilseeds (mt)	26,764	--	--	676	847	8,326	--	--	282	243
Soybeans (mt)	26,023	23,500	23,300	632	790	7,379	6,200	5,100	196	197
Protein meal (mt)	7,311	--	--	309	490	1,966	--	--	79	95
Vegetable oils (mt)	2,590	--	--	230	210	1,766	--	--	152	168
Essential oils (mt)	45	--	--	4	4	588	--	--	49	44
Other	173	--	--	17	11	4,287	--	--	358	356
Total	143,978	142,000	148,700	9,296	10,040	57,245	54,500	52,000	3,998	3,884
IMPORTS										
Animals, live (no.) ¹	5,331	--	--	394	474	1,594	1,700	1,500	123	102
Meats and preps., excl. poultry (mt)	1,154	1,200	1,200	93	117	2,630	2,700	2,800	210	246
Beef and veal (mt)	797	--	--	64	85	1,609	--	--	126	167
Pork (mt)	261	--	--	21	24	754	--	--	63	58
Dairy products (mt) ¹	354	--	--	26	48	1,225	1,400	1,400	99	150
Poultry and products ¹	--	--	--	--	--	195	--	--	17	20
Fats, oils, and greases (mt)	80	--	--	8	6	60	--	--	6	4
Hides and skins, incl. furskins (mt)	--	--	--	--	--	206	--	--	12	12
Wool, unmanufactured (mt)	44	--	--	3	3	154	--	--	9	9
Grains and feeds (mt)	8,342	7,900	7,900	625	578	2,963	2,900	3,000	227	220
Fruits, nuts, and preps.,										
excl. juices (mt) ⁷	7,252	7,700	8,300	511	523	3,837	4,800	5,100	267	302
Bananas and plantains (mt)	3,998	4,000	4,000	322	311	1,220	1,200	1,300	99	95
Fruit juices (1,000 hectoliters) ¹	27,807	28,100	28,000	2,087	1,920	829	--	--	65	47
Vegetables and preps. (mt)	4,218	5,100	5,500	242	270	3,707	4,400	4,600	244	298
Tobacco, unmanufactured (mt)	294	200	300	28	25	1,089	1,100	1,100	90	90
Cotton, unmanufactured (mt)	17	--	--	1	0	20	--	--	1	0
Seeds (mt)	224	--	--	7	9	371	--	--	22	20
Nursery stock and cut flowers ¹	--	--	--	--	--	1,004	1,200	1,200	54	53
Sugar, cane or beet (mt)	2,913	--	--	309	174	984	--	--	105	73
Oilseeds and products (mt)	3,963	4,200	4,300	393	336	2,242	2,200	2,400	202	175
Oilseeds (mt)	1,035	--	--	156	93	384	--	--	48	32
Protein meal (mt)	1,048	--	--	86	100	188	--	--	16	14
Vegetable oils (mt)	1,880	--	--	151	143	1,670	--	--	137	129
Beverages, excl. fruit										
juices (1,000 hectoliters) ¹	23,792	--	--	2,426	2,680	3,375	--	--	306	343
Coffee, tea, cocoa, spices (mt)	2,265	--	--	199	184	6,048	--	--	608	430
Coffee, incl. products (mt)	1,180	1,200	1,200	111	88	3,886	3,900	4,000	428	239
Cocoa beans and products (mt)	767	1,000	1,000	59	65	1,471	1,800	1,900	117	124
Rubber and allied gums (mt)	1,068	1,100	1,200	79	99	1,229	1,100	1,300	92	79
Other	--	--	--	--	--	2,528	--	--	214	235
Total	--	--	--	--	--	36,289	38,000	39,500	2,975	2,908

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

Exports. 1997 data are from *Foreign Agricultural Trade of the U.S.* 1. Not included in total volume. 2. Forecast includes beef, pork, and variety meat. 3. Forecast includes pulses. 4. Forecast includes wheat flour. 5. Forecast excludes grain products. 6. Forecast includes linters.

7. Forecast includes juice. NOTE: Totals include transshipments through Canada, but transshipments are not distributed by commodity as previously.

NOTE: Unadjusted transshipments through Canada for 1997 exports. Information Contact: Mary Fant (202) 694-5272

Table 28—U.S. Agricultural Exports by Region

	Calendar year			1997			1998			
	1996	1997	1998F	Jul	Feb	Mar	Apr	May	Jun	Jul
	\$ million									
Region & country										
WESTERN EUROPE	9,702	9,540	9,000	502	950	712	601	547	517	459
European Union ¹	9,322	8,918	8,600	443	917	683	577	525	501	435
Belgium-Luxembourg	749	668	--	32	54	40	41	51	43	38
France	524	570	--	35	64	40	25	30	25	25
Germany	1,489	1,319	--	61	141	94	96	92	87	72
Italy	796	756	--	42	93	83	44	43	40	21
Netherlands	2,218	1,928	--	82	239	145	97	83	84	79
United Kingdom	1,233	1,312	--	96	104	110	103	103	89	102
Portugal	291	249	--	1	19	12	9	9	35	5
Spain, incl. Canary Islands	1,124	1,140	--	39	112	97	83	47	48	38
Other Western Europe	380	622	400	59	32	29	25	23	16	24
Switzerland	211	517	--	50	24	24	17	14	9	17
EASTERN EUROPE	439	282	300	13	35	24	21	22	31	26
Poland	232	121	--	8	19	16	8	9	18	12
Former Yugoslavia	88	96	--	4	12	2	7	4	6	6
Romania	57	16	--	0	1	2	2	4	4	2
NEWLY INDEPENDENT STATES	1,747	1,483	1,400	111	124	122	114	144	124	141
Russia	1,328	1,204	1,100	89	92	102	95	112	93	97
ASIA ²	28,560	25,624	19,700	1,652	1,876	2,069	1,829	1,588	1,567	1,493
West Asia (Mideast)	2,513	2,553	2,400	176	177	230	185	161	171	174
Turkey	637	727	600	50	47	65	61	63	60	48
Iraq	3	82	--	13	6	9	8	0	6	30
Israel, incl. Gaza and W. Bank	617	537	--	33	43	37	25	34	19	29
Saudi Arabia	551	618	600	42	34	53	43	33	35	33
South Asia	653	760	700	40	38	32	29	35	33	31
Bangladesh	88	120	--	9	11	12	9	6	6	9
India	113	155	--	12	9	12	11	11	20	7
Pakistan	352	442	--	9	17	6	2	5	6	8
China	2,092	1,600	1,500	96	176	182	102	45	63	57
Japan	11,704	10,532	9,500	639	850	871	898	753	711	681
Southeast Asia	3,270	2,988	2,200	180	175	187	164	147	163	183
Indonesia	852	772	500	64	21	26	28	14	45	50
Philippines	892	873	700	36	51	56	75	66	68	63
Other East Asia	8,327	7,191	5,800	519	461	567	451	446	427	366
Korea, Rep.	3,871	2,857	2,000	203	184	252	207	203	172	161
Hong Kong	1,490	1,712	1,700	128	122	137	131	125	128	105
Taiwan	2,965	2,616	2,100	186	154	174	113	118	127	99
AFRICA	2,877	2,267	2,400	281	179	181	94	104	145	174
North Africa	1,986	1,559	1,700	231	116	108	44	67	73	122
Morocco	244	163	--	22	6	9	2	4	7	20
Algeria	322	315	--	33	23	28	15	13	20	28
Egypt	1,319	964	1,100	170	74	61	25	43	44	73
Sub-Saharan	891	707	700	50	63	73	51	38	72	51
Nigeria	190	115	--	11	11	8	7	11	19	20
S. Africa	309	220	--	10	14	29	14	7	16	11
LATIN AMERICA and CARIBBEAN	10,486	10,363	11,500	796	989	985	924	842	878	970
Brazil	588	536	600	29	37	24	35	24	36	23
Caribbean Islands	1,419	1,501	--	122	127	133	116	104	99	131
Central America	1,006	1,047	--	78	110	89	113	97	98	94
Colombia	631	538	--	58	54	56	53	49	67	38
Mexico	5,447	5,184	6,000	404	514	562	484	477	486	546
Peru	310	193	--	15	27	17	33	15	16	33
Venezuela	483	571	500	35	55	51	45	35	29	55
CANADA	6,146	6,795	7,200	594	534	596	611	627	645	577
OCEANIA	489	550	500	47	41	42	42	46	46	38
TOTAL	60,445	57,245	54,500	3,998	4,727	4,733	4,249	3,928	3,971	3,884
Developed countries	28,890	28,431	--	1,822	2,426	2,281	2,197	2,014	1,964	1,794
Developing countries	27,681	25,687	--	1,964	1,998	2,141	1,836	1,722	1,820	1,891
Other countries	3,873	3,128	--	213	303	311	217	191	187	199

F = Forecast. -- = Not available. Based on fiscal year beginning October 1 and ending September 30. 1. Austria, Finland, and Sweden are included in the European Union. 2. Asia forecasts exclude West Asia (Mideast). NOTE: Adjusted for transshipments through Canada, but transshipments are not distributed as previously. Information contact: Mary Fant (202) 694-5272

Farm Income

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

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	\$ billion									
Final crop output	81.5	83.3	81.0	89.0	82.4	100.3	95.8	115.6	112.5	104.6
Food grains	8.2	7.5	7.3	8.5	8.2	9.5	10.4	10.7	10.6	8.9
Feed crops	17.0	18.7	19.3	20.1	20.2	20.4	24.6	27.3	27.6	24.1
Cotton	5.0	5.5	5.2	5.2	5.2	6.7	6.9	7.0	6.5	5.9
Oil crops	11.9	12.3	12.7	13.3	13.2	14.7	15.5	16.4	19.9	17.7
Tobacco	2.4	2.7	2.9	3.0	2.9	2.7	2.5	2.8	2.9	3.1
Fruits and tree nuts	9.2	9.4	9.9	10.2	10.3	10.3	11.1	11.9	12.8	12.4
Vegetables	11.6	11.5	11.6	11.9	13.5	13.9	14.9	14.6	15.1	16.1
All other crops	11.6	12.8	13.1	13.7	14.0	14.9	15.2	15.9	16.7	16.6
Home consumption	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Value of inventory adjustment ¹	4.5	2.8	-1.2	3.2	-5.3	7.2	-5.4	8.9	0.3	-0.2
Final animal output	83.8	90.2	87.3	87.1	91.7	89.7	87.6	92.2	96.2	93.9
Meat animals	46.7	51.2	50.1	47.7	50.8	46.8	44.8	44.4	49.9	45.6
Dairy products	19.4	20.2	18.0	19.7	19.2	19.9	19.9	22.8	21.0	22.7
Poultry and eggs	15.4	15.3	15.2	15.5	17.3	18.4	19.1	22.3	22.2	22.6
Miscellaneous livestock	2.5	2.5	2.5	2.6	2.8	3.0	3.2	3.4	3.5	3.5
Home consumption	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.4	0.4
Value of inventory adjustment ¹	-0.7	0.4	1.0	1.0	1.1	1.1	0.2	-1.1	-0.7	-0.9
Services and forestry	15.8	15.3	15.4	15.2	16.6	17.9	19.4	20.7	22.1	22.4
Machine hire and customwork	1.7	1.8	1.8	1.8	1.9	2.1	1.9	2.2	2.6	2.6
Forest products sold	2.0	1.8	1.8	2.2	2.6	2.7	2.9	2.8	2.8	2.6
Other farm income	4.9	4.5	4.7	4.2	4.6	4.4	5.2	5.9	6.3	6.3
Gross imputed rental value of farm dwellings	7.2	7.2	7.2	7.0	7.6	8.7	9.3	9.8	10.3	11.0
Final agricultural sector output²	181.0	188.7	183.7	191.3	190.7	207.9	202.8	228.5	230.8	221.0
<i>Minus</i> Intermediate consumption outlays:	88.7	92.9	94.6	93.5	100.6	104.9	109.0	112.9	118.6	116.9
Farm origin	38.1	39.5	38.6	38.6	41.2	41.3	41.6	42.7	45.7	43.9
Feed purchased	20.7	20.4	19.3	20.1	21.4	22.6	23.8	25.2	25.2	24.5
Livestock and poultry purchased	12.9	14.6	14.1	13.6	14.6	13.3	12.3	11.2	13.8	12.8
Seed purchased	4.4	4.5	5.1	4.9	5.2	5.4	5.5	6.2	6.7	6.7
Manufactured inputs	20.6	22.0	23.2	22.7	23.1	24.4	26.2	28.6	29.0	29.0
Fertilizers and lime	8.2	8.2	8.7	8.3	8.4	9.2	10.0	10.9	10.9	11.0
Pesticides	5.0	5.4	6.3	6.5	6.7	7.2	7.7	8.5	8.8	8.8
Petroleum fuel and oils	4.8	5.8	5.6	5.3	5.3	5.3	5.4	6.0	6.2	6.2
Electricity	2.6	2.6	2.6	2.6	2.7	2.7	3.0	3.2	3.0	3.0
Other intermediate expenses	30.0	31.4	32.8	32.2	36.2	39.2	41.2	41.5	43.9	44.0
Repair and maintenance of capital items	8.4	8.6	8.6	8.5	9.2	9.1	9.5	10.3	10.4	10.6
Machine hire and customwork	3.4	3.6	3.5	3.8	4.4	4.8	4.8	4.7	4.8	4.8
Marketing, storage, and transportation	4.2	4.2	4.7	4.5	5.6	6.8	7.2	6.9	7.1	7.2
Contract labor	1.3	1.6	1.6	1.7	1.8	1.8	2.0	2.1	2.6	2.7
Miscellaneous expenses	12.7	13.5	14.3	13.7	15.2	16.7	17.8	17.5	19.0	18.8
<i>Plus</i> Net government transactions:	5.1	3.1	2.1	2.7	6.9	1.0	0.1	0.1	0.1	0.8
+ Direct government payments	10.9	9.3	8.2	9.2	13.4	7.9	7.3	7.3	7.5	8.3
- Motor vehicle registration and licensing fees	0.3	0.4	0.3	0.4	0.4	0.4	0.5	0.4	0.5	0.4
- Property taxes	5.5	5.9	5.8	6.1	6.2	6.5	6.7	6.8	7.0	7.0
Gross value added	97.4	98.9	91.2	100.5	97.0	104.0	93.9	115.7	112.3	104.8
<i>Minus</i> Capital consumption	18.1	18.1	18.2	18.3	18.4	18.7	19.1	19.4	19.5	19.7
Net value added²	79.3	80.7	73.0	82.1	78.6	85.3	74.8	96.3	92.8	85.1
<i>Minus</i> Factor payments:	34.0	36.0	34.4	34.6	35.1	37.0	38.8	42.9	42.9	43.1
Employee compensation (total hired labor)	10.7	12.5	12.3	12.3	13.2	13.5	14.3	15.4	16.0	16.6
Net rent received by nonoperator landlords	9.4	10.0	9.9	11.2	11.0	11.8	11.8	14.3	13.2	12.9
Real estate and non-real estate interest	13.9	13.4	12.1	11.1	10.8	11.7	12.7	13.2	13.7	13.6
Net farm income²	45.3	44.7	38.6	47.5	43.6	48.3	36.0	53.4	49.8	42.0

Values in last two columns are preliminary or forecast. 1. A positive value of inventory change represents current-year production not sold by December 1.

A negative value is an offset to production from prior years included in current-year sales. 2. Final sector output is the gross value of commodities and services produced within a year. Net value added is the sector's contribution to the National economy and is the sum of income from production earned by all factors of production. Net farm income is the farm operators' share of income from the sector's production activities. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development.

Information contact: Roger Strickland (202)694-5592 or rogers@econ.ag.gov

Table 30—Farm Income Statistics

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	\$ billion									
Cash Income statement:										
1. Cash receipts	160.8	169.5	167.9	171.4	177.8	181.2	188.1	199.6	208.7	199.1
Crops ¹	76.9	80.3	82.1	85.7	87.6	93.1	101.1	106.6	112.1	104.8
Livestock	83.9	89.2	85.8	85.6	90.2	88.2	87.0	93.0	96.6	94.4
2. Direct Government payments	10.9	9.3	8.2	9.2	13.4	7.9	7.3	7.3	7.5	8.3
3. Farm-related income ²	8.6	8.1	8.3	8.2	9.0	9.2	10.1	10.9	11.8	11.4
4. Gross cash income (1+2+3)	180.3	186.9	184.3	188.7	200.2	198.3	205.5	217.8	228.0	218.8
5. Cash expenses ³	127.5	134.1	134.0	133.6	141.2	147.6	153.6	161.4	167.2	165.8
6. Net cash income (4-5)	52.8	52.8	50.4	55.1	59.0	50.7	51.8	56.4	60.8	53.0
Farm income statement:										
7. Gross cash income (4)	180.3	186.9	184.3	188.7	200.2	198.3	205.5	217.8	228.0	218.8
8. Noncash income ⁴	7.9	7.9	7.8	7.6	8.1	9.2	9.8	10.2	10.7	11.4
9. Value of inventory adjustment	3.8	3.3	-0.2	4.2	-4.2	8.3	-5.1	7.8	-0.4	-1.1
10. Gross farm income (7+8+9)	191.9	198.0	191.9	200.5	204.1	215.8	210.1	235.8	238.3	229.2
11. Total production expenses	146.7	153.3	153.3	152.9	160.5	167.5	174.1	182.4	188.4	187.2
12. Net farm income (10-11)	45.3	44.7	38.6	47.5	43.6	48.3	36.0	53.4	49.8	42.0

Values for last 2 years are preliminary or forecasts. Numbers in parentheses indicate the combination of items required to calculate an item.

Totals may not add due to rounding. 1. Includes commodities placed under CCC loans and profits made on loans redeemed.

2. Income from custom labor, machine hire, recreational activities, forest product sales, and other farm sources. 3. Excludes depreciation and perquisites to hired labor. Excludes farm operator dwellings. 4. Value of farm products consumed on farms where produced plus the imputed rental value of farm dwellings. *Information contact: Roger Strickland (202) 694-5582 or rogers@econ.ag.gov*

Table 31—Average Income to Farm Operator Households¹

	1991	1992	1993	1994	1995	1996	1997	1998
	\$ per farm							
Net cash farm business income ²	10,678	11,320	11,248	11,389	11,218	13,502	12,460	--
Less depreciation ³	5,127	5,187	6,219	6,466	6,795	6,906	6,578	--
Less wages paid to operator ⁴	441	216	454	425	522	531	513	--
Less farmland rental income ⁵	323	360	534	701	769	672	568	--
Less adjusted farm business income due to other household(s) ⁶	1,093	961	872	815	649	1,094	1,429	--
	\$ per farm operator household							
Equals adjusted farm business income	3,694	4,596	3,168	2,981	2,484	4,300	3,373	--
Plus wages paid to operator	441	216	454	425	522	531	513	--
Plus net income from farmland rental ⁷	323	360	--	--	1,053	1,178	945	--
Equals farm self-employment income	4,458	5,172	3,623	3,407	4,059	6,009	4,831	--
Plus other farm-related earnings ⁸	1,352	2,008	1,192	970	661	1,898	1,158	--
Equals earnings of the operator household from farming activities	5,810	7,180	4,815	4,376	4,720	7,906	5,989	4,564
Plus earnings of the operator household from off-farm sources ⁹	31,638	35,731	35,408	38,092	39,671	42,455	46,358	45,060
Equals average farm operator household income	37,447	42,911	40,223	42,469	44,392	50,361	52,347	49,623
	\$ per U.S. household							
U.S. average household income ¹⁰	37,922	38,840	41,428	43,133	44,938	47,123	--	--
	Percent							
Average farm operator household income as percent of U.S. average household income	98.7	110.5	97.1	98.5	98.8	106.9	--	--
Average operator household earnings from farming activities as percent of average operator household income	15.5	16.7	12.0	10.3	10.6	15.7	11.4	--

-- = Not available. Values in the last three years preliminary or forecast. 1. This table derives farm operator household income estimates from the Agricultural Resource Management Study (ARMS) that are consistent with Current Population Survey (CPS) methodology. The CPS, conducted by the Bureau of the Census, is the source of official U.S. household income statistics. The CPS defines income to include any income received as cash. The CPS definition departs from a strictly cash concept by including depreciation as an expense that farm operators and other self-employed people subtract from gross receipts when reporting net cash income. 2. A component of farm-sector income. Excludes income of contractors and landlords as well as the income of farms organized as nonfamily corporations or cooperatives, and farms run by a hired manager. Includes income of farms organized as proprietorships, partnerships, and family corporations. 3. Consistent with the CPS definition of self-employed income, reported depreciation expenses are subtracted from net cash farm income. The ARMS collects data on farm business depreciation used for tax purposes. 4. Wages paid to the operator are excluded because they are not shared among other households that have claims on farm business income. These wages are added to the operator household's adjusted farm business income to obtain farm self-employment income. 5. Gross rental income is excluded because net rental income from farm operation is added below to income received by the household. 6. More than one household may have a claim on the income of a farm business. On average, 1.1 households share the income of a farm business. 7. Includes net rental income from the farm business. Also includes net rental income from farmland held by household members that is not part of the farm business. In 1991 and 1992, gross rental income from the farm business was used because net rental income data were not collected. In 1993 and 1994, net rental income data were collected as part of off-farm income. 8. Wages paid to other operator household members by the farm business, and net income from a farm business other than the one surveyed. In 1996, also includes the value of commodities provided to household members for farm work. 9. Wages, salaries, net income from nonfarm businesses, interest, dividends, transfer payments, etc. In 1993 and 1994, also includes net rental income from farmland. 10. From the CPS. Sources: U.S. Department of Agriculture, Economic Research Service, 1991, 1992, 1993, 1994, and 1995 Farm Costs and Returns Survey (FCRS), and 1996 Agricultural Resource Management Study for farm operator household data. U.S. Department of Commerce, Bureau of the Census Current Population Survey (PCS), for average household income. *Information contact: Bob Hoppe (202) 694-5572 or rhoppe@econ.ag.gov*

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

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
\$ billion										
Farm assets	794.0	819.7	822.1	873.8	910.7	943.0	985.4	\$1,034.9	\$1,083.0	\$1,129.5
Real estate	604.3	623.3	628.9	646.3	678.3	712.4	761.3	805.4	852.9	895.6
Livestock and poultry ¹	66.2	70.9	68.1	71.0	72.8	67.9	58.1	59.4	58.5	57.0
Machinery and motor vehicles	84.1	86.3	85.9	85.3	86.7	87.9	86.9	89.0	90.0	91.0
Crops stored ^{2,3}	23.7	23.0	22.2	24.2	23.3	23.1	27.2	30.6	28.0	30.0
Purchased inputs	2.6	2.8	2.6	3.9	3.8	5.0	3.4	4.4	4.6	5.0
Financial assets	36.8	38.3	40.5	43.0	46.5	47.9	49.0	48.9	49.0	50.0
Total farm debt	138.1	138.1	139.4	139.3	142.2	147.1	150.8	156.2	165.8	172.2
Real estate debt ³	76.2	74.9	75.1	75.6	76.3	78.0	79.6	81.9	85.9	88.7
Non-real estate debt ⁴	61.9	63.2	64.3	63.6	65.9	69.1	71.5	74.2	79.9	83.5
Total farm equity	656.0	681.5	682.7	734.5	768.5	795.9	834.6	878.7	917.2	957.2
Percent										
Selected ratios										
Debt to assets	17.4	16.9	17.0	15.9	15.6	15.6	15.3	15.1	15.3	15.3
Debt to equity	21.0	20.3	20.4	19.0	18.5	18.5	18.1	17.8	18.1	18.0

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

Table 33—Cash Receipts from Farming

	Annual			1997	1998					
	1995	1996	1997	Jun	Jan	Feb	Mar	Apr	May	Jun
\$ million										
Commodity sales ¹	188,108	199,580	208,665	14,863	19,512	13,981	15,821	14,328	13,917	14,714
Livestock and products	87,018	93,005	96,568	8,091	8,064	7,351	8,731	7,465	7,800	8,336
Meat animals	44,828	44,414	49,925	4,393	4,081	3,889	4,852	3,554	3,995	4,409
Dairy products	19,894	22,820	20,989	1,662	1,962	1,810	1,989	1,913	1,903	1,883
Poultry and eggs	19,070	22,345	22,183	1,765	1,757	1,434	1,655	1,781	1,674	1,772
Other	3,227	3,425	3,471	271	264	218	236	217	228	271
Crops	101,090	106,575	112,097	6,772	11,448	6,630	7,090	6,863	6,116	6,378
Food grains	10,417	10,741	10,603	1,142	853	520	531	375	363	1,017
Feed crops	24,581	27,265	27,638	1,596	3,729	1,913	1,771	1,249	1,116	1,355
Cotton (lint and seed)	6,851	6,983	6,515	167	1,129	494	283	301	274	180
Tobacco	2,548	2,796	2,886	0	418	120	43	61	0	0
Oil-bearing crops	15,496	16,362	19,911	678	2,676	1,245	1,214	879	694	621
Vegetables and melons	14,913	14,561	15,086	1,393	1,051	845	1,218	1,414	1,550	1,399
Fruits and tree nuts	11,119	11,933	12,790	904	583	511	616	757	737	914
Other	15,165	15,935	16,668	891	1,009	983	1,414	1,826	1,384	891
Government payments	7,279	7,340	7,496	25	1,828	93	52	75	80	89
Total	195,388	206,919	216,160	14,888	21,340	14,074	15,873	14,403	13,997	14,802

Annual values for the most recent year and monthly values for the 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: Roger Strickland (202) 694-5592. To receive current monthly cash receipts, contact Larry Traub at (202) 694-5593 or ltraub@econ.ag.gov.

Table 34—Cash Receipts from Farm Marketings, by State

Region and State	Livestock and products				Crops ¹				Total ¹			
	1996	1997	May 1998	June 1998	1996	1997	May 1998	June 1998	1996	1997	May 1998	June 1998
\$ million												
NORTH ATLANTIC												
Maine	262	258	18	18	220	228	15	6	482	486	33	24
New Hampshire	72	69	6	5	97	97	6	4	169	166	12	9
Vermont	433	416	39	38	99	97	8	4	532	513	46	42
Massachusetts	110	102	9	9	392	430	18	24	502	532	27	33
Rhode Island	11	9	1	1	73	74	6	3	84	83	7	4
Connecticut	236	218	15	16	253	279	19	11	489	496	34	27
New York	2,050	1,859	163	165	981	1,037	55	52	3,031	2,896	218	217
New Jersey	196	180	16	15	607	596	41	53	803	776	57	67
Pennsylvania	2,865	2,789	250	239	1,283	1,339	91	80	4,148	4,128	340	319
NORTH CENTRAL												
Ohio	1,943	1,869	158	148	2,853	3,476	153	134	4,796	5,345	312	282
Indiana	1,913	1,896	135	153	3,620	3,610	126	118	5,533	5,506	261	271
Illinois	2,063	1,937	175	162	6,453	7,339	302	265	8,516	9,276	477	427
Michigan	1,450	1,352	120	116	2,154	2,236	123	113	3,604	3,588	243	229
Wisconsin	4,299	4,070	350	393	1,732	1,686	76	79	6,030	5,756	427	473
Minnesota	4,147	4,054	336	355	4,654	4,101	196	222	8,800	8,155	533	577
Iowa	5,451	5,530	397	450	6,698	7,311	318	323	12,148	12,841	715	773
Missouri	2,463	2,795	220	201	2,409	2,768	99	111	4,872	5,564	319	313
North Dakota	539	611	50	55	2,891	2,702	94	123	3,429	3,313	144	178
South Dakota	1,634	1,820	156	162	1,875	2,417	77	104	3,509	4,237	233	266
Nebraska	5,277	5,542	387	488	3,933	4,550	170	154	9,211	10,092	557	642
Kansas	4,541	5,017	381	433	2,978	3,985	103	224	7,519	9,001	484	658
SOUTHERN												
Delaware	573	573	48	55	180	174	6	13	753	748	54	68
Maryland	901	915	80	84	639	623	38	38	1,540	1,538	119	122
Virginia	1,477	1,538	127	133	907	863	31	48	2,384	2,401	158	181
West Virginia	309	324	26	26	79	71	3	6	388	394	29	33
North Carolina	4,431	4,694	320	337	3,466	3,608	188	194	7,897	8,302	508	531
South Carolina	748	797	63	56	869	898	40	69	1,616	1,695	103	124
Georgia	3,279	3,442	283	285	2,452	2,445	158	219	5,731	5,887	440	504
Florida	1,206	1,265	91	100	5,038	4,978	668	379	6,244	6,243	760	479
Kentucky	1,727	1,978	135	139	1,842	1,655	34	54	3,569	3,633	169	193
Tennessee	999	1,005	103	98	1,406	1,287	54	69	2,405	2,292	157	167
Alabama	2,362	2,431	193	184	808	796	60	52	3,170	3,227	253	237
Mississippi	1,934	2,006	152	156	1,504	1,470	56	63	3,438	3,476	208	219
Arkansas	3,374	3,416	277	295	2,470	2,446	82	173	5,844	5,862	358	468
Louisiana	688	659	58	64	1,641	1,481	35	43	2,328	2,140	93	107
Oklahoma	2,414	3,061	288	284	1,105	1,308	76	234	3,519	4,369	364	518
Texas	7,821	8,184	643	787	5,139	5,277	277	352	12,960	13,461	921	1,139
WESTERN												
Montana	797	991	80	81	1,203	1,072	42	49	1,999	2,063	122	130
Idaho	1,330	1,389	141	163	2,043	1,926	82	80	3,372	3,315	224	243
Wyoming	478	646	102	44	189	199	3	6	667	845	106	50
Colorado	2,763	3,012	215	289	1,362	1,388	62	65	4,125	4,399	277	354
New Mexico	1,198	1,354	145	149	506	562	40	68	1,704	1,915	185	217
Arizona	840	888	68	77	1,306	1,257	114	97	2,145	2,145	183	174
Utah	644	715	58	59	228	238	11	14	872	953	68	73
Nevada	154	180	17	14	132	130	4	13	287	310	21	27
Washington	1,665	1,604	125	141	3,833	3,778	187	252	5,497	5,382	312	393
Oregon	658	740	71	75	2,246	2,373	91	141	2,904	3,113	163	216
California	6,212	6,294	501	529	17,285	18,995	1,543	1,344	23,497	25,289	2,044	1,873
Alaska	6	6	1	1	23	26	2	2	29	32	2	3
Hawaii	66	68	6	6	420	415	33	34	487	483	39	40
U.S.	93,005	96,568	7,800	8,336	106,575	112,097	6,116	6,378	199,580	208,665	13,917	14,714

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: Roger Strickland (202) 694-5592.

To receive current monthly cash receipts contact Larry Traub at (202) 694-5593 or ltraub@econ.ag.gov

Table 35—CCC Net Outlays by Commodity & Function

	Fiscal year									
	1990	1991	1992	1993	1994	1995	1996	1997	1998 E	1999 E
	\$ million									
COMMODITY/PROGRAM										
Feed grains:										
Corn	2,435	2,387	2,105	5,143	625	2,090	2,021	2,587	2,649	2,604
Grain sorghum	349	243	190	410	130	153	261	284	285	280
Barley	-94	71	174	186	202	129	114	109	152	114
Oats	-5	12	32	16	5	19	8	8	9	8
Corn and oat products	8	9	9	10	10	1	0	0	0	0
Total feed grains	2,693	2,722	2,510	5,765	972	2,392	2,404	2,988	3,095	3,006
Wheat and products	796	2,805	1,719	2,185	1,729	803	1,491	1,332	1,587	1,486
Rice	667	867	715	887	836	814	499	459	515	471
Upland cotton	-79	382	1,443	2,239	1,539	99	685	561	1,065	957
Tobacco	-307	-143	29	235	693	-298	-496	-156	286	-49
Dairy	505	839	232	253	158	4	-98	67	224	113
Soybeans	5	40	-29	109	-183	77	-65	5	11	222
Peanuts	1	48	41	-13	37	120	100	6	0	-1
Sugar	15	-20	-19	-35	-24	-3	-63	-34	-39	-39
Honey	47	19	17	22	0	-9	-14	-2	0	0
Wool	104	172	191	179	211	108	55	0	0	0
Operating expense ¹	618	625	6	6	6	6	6	6	5	6
Interest expenditure	632	745	532	129	-17	-1	140	-111	-109	-42
Export programs ²	-34	733	1,459	2,193	1,950	1,361	-422	125	329	530
1988/96 Disaster/tree/ livestock assistance	161 ³	121	1,054	944	2,566	660	95	130	25	5
Conservation reserve program	0	0	0	0	0	0	2	1,671	1,829	1,639
Other conservation programs	0	0	0	0	0	0	7	105	291	340
Other	647	155	-162	949	-137	-103	320	104	209	426
Total	6,471	10,110	9,738	16,047	10,336	6,030	4,646	7,256	9,323	9,070
Function										
Price support loans (net)	-399	418	584	2,065	527	-119	-951	110	444	115
Cash direct payments: ⁴										
Production flexibility contract	0	0	0	0	0	0	5,141	6,320	5,716	5,512
Deficiency	4,178	6,224	5,491	8,607	4,391	4,008	567	-1,118	-11	0
Diversion	0	0	0	0	0	0	0	0	0	0
Dairy termination	189	96	2	0	0	0	0	0	0	0
Loan Deficiency	3	21	214	387	495	29	0	0	6	103
Other	0	0	140	149	171	97	95	7	360	335
Disaster	0	0	0	0	0	0	0	0	0	0
Conservation reserve program	0	0	0	0	0	0	2	1,671	1,829	1,639
Other conservation programs	0	0	0	0	0	0	0	85	238	298
Non-Insured Assistance (NAP)	0	0	0	0	0	0	2	52	54	77
Total direct payments	4,370	6,341	5,847	9,143	5,057	4,134	5,807	7,017	8,192	7,964
1988-94 crop disaster	5 ³	6	960	872	2,461	584	14	2	0	0
Emergency livestock/tree/DRAP										
livestock indemn/forage assist.	156	115	94	72	105	76	81	128	25	5
Purchases (net)	-48	646	321	525	293	-51	-249	-60	145	72
Producer storage payments	185	1	14	9	12	23	0	0	0	0
Processing, storage, and transportation										
	278	240	185	136	112	72	51	33	32	30
Operating expense ¹	618	625	6	6	6	6	6	6	5	6
Interest expenditure	632	745	532	129	-17	-1	140	-111	-109	-42
Export programs ²	-34	733	1,459	2,193	1,950	1,361	-422	125	329	530
Other	708	240	-264	897	-170	-55	169	6	260	390
Total	6,471	10,110	9,738	16,047	10,336	6,030	4,646	7,256	9,323	9,070

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. 3. Approximately \$1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates and were not recorded directly as disaster assistance outlays. 4. Includes cash payments only. Excludes generic certificates in FY 86-96. E=Estimated in the FY 1999 Mid-Session Review Budget which was released on May 26, 1998 based on April 1998 supply and demand estimates. The CCC outlays shown for 1996-1999 include the impact of the Federal Agricultural Improvement and Reform Act of 1996, which was enacted April 4, 1996. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds). Information contact: Richard Pazdalski Farm Service Agency - Budget at (202) 720-3675 or Richard_Pazdalski@wdc.fsa.usda.gov.

Food Expenditures

Table 36—Food Expenditures

	Annual			1998			Year-to-date cumulative		
	1995	1996	1997 P	Jun	Jul P	Aug P	Jun	Jul P	Aug P
	\$ billion								
Sales ¹									
At home ²	354.2	367.6	380.2	32.8	30.7	29.8	190.9	221.7	251.5
Away from home ³	280.8	288.5	297.9	25.7	26.4	28.3	146.6	172.8	199.5
	1995 \$ billion								
Sales ¹									
At home ²	367.3	367.4	371.0	31.5	29.5	28.5	183.6	213.1	241.6
Away from home ³	287.7	288.5	289.7	24.4	25.0	26.8	140.7	165.7	192.5
	Percent change from year earlier (\$ billion)								
Sales ¹									
At home ²	3.8	3.8	3.4	4.6	-6.1	-8.8	3.7	2.2	0.8
Away from home ³	4.5	2.7	3.0	1.1	0.7	6	0.6	0.6	1.3
	Percent change from year earlier (1995 \$ billion)								
Sales ¹									
At home ²	0.5	0.1	1.0	2.5	-7.9	-10.5	1.8	0.4	-1
Away from home ³	2.2	0.3	0.2	-1.5	-1.8	3.3	-1.9	-1.9	-1.2

R = Revised. P = Preliminary. 1. Food only (excludes alcoholic beverages). Not seasonally adjusted. 2. Excludes donations and home production.

3. Excludes donations, child nutrition subsidies, and meals furnished to employees, patients, and inmates. *Information contact: Annette Clauson (202) 694-5373*

Note: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food, excluding alcoholic beverages and pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced and consumed on farms and food furnished to employees; (4) this series includes all sales of meals and snacks, while PCE includes only purchases using personal funds, excluding business travel and entertainment.

For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," ERS Agr. Econ. Rpt. No. 575, Aug. 1987.

Transportation

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

	Annual			1997			1998			
	1995	1996	1997 R	Jul	Feb	Mar R	Apr P	May P	Jun R	Jul P
Rail freight rate index ¹ (Dec. 1984=100)										
All products	111.7	111.5	112.1	112.4	113.5	113.3	114.0	114.0	113.6	113.6
Farm products	115.6	115.9	120.3	121.1	124.7	124.7	124.7	124.7	124.7	124.7
Grain ²	117.1	118.0	--	--	--	--	--	--	--	--
Food products	111.7	108.8	107.6	108.4	108.0	108.0	108.7	108.7	108.2	108.1
Barge freight rate index ¹ (Dec 1990=100)										
Grain	172.6	129.5	107.1	86.9	102.8	90.9	93.0	86.9	94.5	--
Grain shipments										
Rail carloadings (1,000 cars) ³	28.9	25.2	23.2	20.8	24.6	21.7	20.4	20.4	20.7	21.4
Barge shipments (mil. ton) ^{4,5}	3.5	3.1	2.4	3.5	1.7	--	--	--	--	--
Fresh fruit and vegetable shipments ⁶										
Piggy back (mil. cwt)	1.3	1.1	1.1	1.2	0.9	0.9	0.9	1.3	1.1	0.8
Rail (mil. cwt)	1.9	1.6	1.7	1.7	1.0	1.1	1.2	1.1	1.5	1.5
Truck (mil. cwt)	40.5	35.7	42.6	44.0	34.2	39.9	44.5	50.3	51.7	42.2
Cost of operating trucks hauling produce ⁶										
Fleet operation (¢/mile)	130.3	123.0	135.4	134.5	--	--	--	--	--	--

P = Preliminary. R = Revised. -- = Not available. 1. Department of Labor, Bureau of Labor Statistics. 2. Discontinued. 3. Weekly average; from Association of American Railroads. 4. Shipments on Illinois and Mississippi waterways, U.S. Corps of Engineers. 5. Annual 1996 is 7-month average. 6. Agricultural Marketing Service, USDA. *Information contact: Jenny Gonzales (202) 694-5296*

Indicators of Farm Productivity

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

	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	--	--

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

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

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Food Supply & Use

Table 39—Per Capita Consumption of Major Food Commodities¹

Commodity	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	<i>Lbs.</i>									
Red meats ^{2,3,4}	117.4	119.5	115.9	112.3	111.9	114.1	112.2	114.8	115.1	112.8
Beef	69.6	68.6	65.4	63.9	63.1	62.8	61.5	63.6	64.4	65.0
Veal	1.3	1.1	1.0	0.9	0.8	0.8	0.8	0.8	0.8	1.0
Lamb & mutton	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8
Pork	45.6	48.8	48.4	46.4	46.9	49.5	48.9	49.6	49.0	46.0
Poultry ^{2,3,4}	51.0	51.9	53.9	56.3	58.3	60.8	62.5	63.3	62.9	64.4
Chicken	39.4	39.6	40.9	42.4	44.2	46.7	48.5	49.3	48.8	49.8
Turkey	11.6	12.4	13.1	13.8	14.1	14.1	14.0	14.1	14.1	14.6
Fish and shellfish ³	16.1	15.1	15.6	15.0	14.8	14.7	14.9	15.1	14.9	14.7
Eggs ⁴	32.7	31.8	30.5	30.2	30.1	30.3	30.4	30.6	30.2	30.5
Dairy products										
Cheese (excluding cottage) ^{2,5}	24.1	23.7	23.8	24.6	25.0	26.0	26.2	26.8	27.3	27.7
American	12.4	11.5	11.0	11.1	11.1	11.3	11.4	11.5	11.8	12.0
Italian	7.6	8.1	8.5	9.0	9.4	10.0	9.8	10.3	10.4	10.8
Other cheeses ⁶	4.1	4.1	4.3	4.5	4.6	4.7	5.0	5.0	5.0	5.0
Cottage cheese	3.9	3.9	3.6	3.4	3.3	3.1	2.9	2.8	2.7	2.6
Beverage milks ²	226.5	222.3	224.2	221.8	221.2	218.3	213.4	213.5	209.7	210.0
Fluid whole milk ⁷	111.9	105.7	97.5	90.4	87.3	84.0	80.1	78.8	75.3	74.6
Fluid lowfat milk ⁸	100.6	100.5	106.5	108.4	109.9	109.3	106.5	105.9	102.5	101.7
Fluid skim milk	14.0	16.1	20.2	22.9	23.9	25.0	26.7	28.7	31.9	33.7
Fluid cream products ⁹	7.6	7.6	7.8	7.6	7.7	8.0	8.0	8.1	8.4	8.7
Yogurt (excluding frozen)	4.3	4.5	4.2	4.0	4.2	4.2	4.3	4.7	5.1	4.8
Ice cream	18.4	17.3	16.1	15.8	16.3	16.3	16.1	16.1	15.7	15.9
Ice milk	7.4	8.0	8.4	7.7	7.4	7.1	6.9	7.6	7.5	7.6
Frozen yogurt	--	--	2.0	2.8	3.5	3.1	3.5	3.5	3.5	2.6
All dairy products, milk equivalent, milkfat basis ¹⁰	601.2	582.5	563.8	568.4	565.6	565.9	574.1	586.0	584.4	575.5
Fats and oils--total fat content	62.9	63.6	60.8	62.8	65.4	67.4	70.2	68.6	66.9	65.8
Butter and margarine (product weight)	15.2	14.8	14.6	15.3	15.0	15.4	15.8	14.7	13.7	13.5
Shortening	21.4	21.5	21.5	22.2	22.4	22.4	25.1	24.1	22.5	22.3
Lard and edible tallow (direct use)	2.7	2.6	2.1	2.4	3.1	4.1	3.9	4.7	4.9	5.3
Salad and cooking oils	25.4	26.3	24.4	24.8	26.7	27.2	26.8	26.3	26.9	26.1
Fresh fruits ¹¹	121.6	120.9	122.9	116.3	113.0	123.5	124.9	126.4	124.5	129.2
Canned fruit ¹²	18.4	18.5	19.0	18.4	17.1	19.8	18.0	18.3	15.0	16.4
Dried fruit	3.1	3.3	3.3	3.1	3.0	2.8	3.0	3.0	2.8	2.8
Frozen fruit	3.6	3.4	3.7	3.5	3.5	3.8	3.4	2.9	4.2	3.9
Selected fruit juices ¹³	72.8	68.3	70.5	66.2	66.6	63.6	74.9	71.6	75.6	75.5
Vegetables ¹¹										
Fresh	162.4	167.4	172.2	166.2	163.3	171.3	172.3	175.6	176.3	178.7
Canning	99.1	94.8	102.4	110.9	113.3	111.6	112.1	107.6	110.4	109.4
Freezing	67.0	64.2	67.6	70.5	72.8	71.6	76.7	81.4	78.2	83.3
Dehydrated and chips	29.9	29.3	29.9	31.8	32.6	32.1	33.0	31.6	31.2	32.9
Pulses	5.7	7.5	6.3	7.1	7.8	8.2	7.8	8.4	8.5	8.0
Peanuts (shelled)	6.4	6.9	7.0	6.0	6.5	6.2	6.0	5.8	5.7	5.7
Tree nuts (shelled)	2.2	2.3	2.2	2.4	2.2	2.2	2.2	2.3	1.9	2.1
Flour and cereal products ¹⁴	171.4	175.5	174.5	182.0	183.6	186.2	191.0	194.1	192.5	198.5
Wheat flour	129.8	131.7	129.6	136.0	136.9	138.8	143.3	144.5	141.8	148.8
Rice (milled basis)	14.0	14.3	15.2	16.2	16.8	17.5	17.6	19.3	20.1	18.9
Caloric sweeteners ¹⁵	131.6	132.7	133.1	137.0	138.0	141.2	144.4	147.3	149.8	152.0
Coffee (green bean equiv.)	10.2	9.8	10.1	10.3	10.3	10.0	9.1	8.2	8.0	9.0
Cocoa (chocolate liquor equiv.)	3.8	3.8	4.0	4.3	4.6	4.6	4.3	3.9	3.6	--

-- = Not available. 1. In pounds, retail weight unless otherwise stated. Consumption normally represents total supply minus exports, nonfood use, and ending stocks. Calendar-year data, except fresh citrus fruits, peanuts, tree nuts, and rice, which are on crop-year basis. 2. Totals may not add due to rounding. 3. Boneless, trimmed weight. Chicken series revised to exclude amount of ready-to-cook chicken going to pet food as well as some water leakage that occurs when chicken is cut up before packaging. 4. Excludes shipments to the U.S. territories. 5. Whole and part-skim milk cheese. Natural equivalent of cheese and cheese products. 6. Includes Swiss, Brick, Muenster, cream, Neufchatel, Blue, Gorgonzola, Edam, and Gouda. 7. Plain and flavored. 8. Plain and flavored, and buttermilk. 9. Heavy cream, light cream, half and half, eggnog, sour cream, and dip. 10. Includes condensed and evaporated milk and dry milk products. 11. Farm weight. 12. Excludes pineapples and berries. 13. Single strength equivalent. 14. Includes rye, corn, oat, and barley products. Excludes quantities used in alcoholic beverages, corn sweeteners, and fuel. 15. Dry weight equivalent.

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