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AGRICULTURAL OUTLOOK

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The next issue (AGO-257) is scheduled for mailing on December 4, 1998. If not delivered by December 24, call (202) 694-5383 (please have mailing label handy). The full text will also be distributed electronically; call (202) 694-5050 for further information.

Cover photo: Grant Heilman Photography

In This Issue . . .

Rice Outlook...Livestock Sector in China...Cotton Textiles... WTO Environmental Issues

China's Livestock Sector Growing Rapidly

China is among the world's largest producers and consumers of animal proteins. Although current per capita consumption of animal proteins is lower in China than in wealthier nations, it is increasing rapidly as China's economy and personal incomes grow. Increasing overall population and rural-to-urban migration is expected to foster continued rapid growth in demand for animal products. Despite measures to increase feed efficiency, China has the potential to become a growing market for feedstuffs and/or animal protein imports, as demand for meats, fish, eggs, and milk is expected to outstrip domestic feedgrain supplies. And because of the sheer size of China's livestock sector, even relatively small changes in either livestock inventory growth or meat demand trends can have notable impacts on global trade projections for feedstuffs or animal proteins.

Environmental Policy & the WTO

The World Trade Organization (WTO) recognizes that environmental protection is a legitimate policy goal, despite the fact that environmental policies can effectively alter production and price levels and thus affect trade patterns. When environmental policies affect trade and production only minimally, the "green box" provisions of the Uruguay Round Agreement on Agriculture permit such policies to be exempt from a country's commitments to reduce support to agriculture. Discussions between now and the conclusion of the WTO mini-round on agriculture scheduled to begin in late 1999 may address a number of unresolved questions, such as how to assess the tradeoff between environmental protection and trade distortion and how to interpret "minimal trade-distorting effects."

U.S. Rice Prices Firm Despite Bumper Supplies

Relatively high prices at planting pulled up U.S. rice area more than 5 percent in 1998 from a year earlier to nearly 3.22 million acres, the second consecutive annual increase. The larger planted area will more than offset a drop in yield to produce the third-largest rice crop on record. U.S. farm prices are projected to remain firm during the 1998/99 marketing year, given expectations of record domestic use, continued strong exports, and smaller ending stocks.

Global rice production is projected to drop more than 2 percent from the 1997/98 record of 385.4 million tons, a result of weaker crops in several major Asian rice producing countries, particularly China and India. The low level of global stocks relative to use will likely have minimal impacts on world trade and international prices, as supplies in these two countries remain adequate for domestic needs and as several exporting countries—particularly Thailand, Vietnam, and Pakistan—are projected to produce large crops in 1998/99.

Textile Imports & Cotton Production Weave New Relationship

U.S. imports of cotton textiles and apparel have been rising during 1998 at twice the average rate of the last decade. In part because of this import surge, U.S. textile mills are expected to use less cotton fiber in 1998/99. The U.S. milling industry purchases domestically produced cotton fiber almost exclusively, and farmers are seeing their best customer reduce its purchases. At the same time, Asian textile exporters that traditionally ship to the U.S. are expected to enter the next century with weaker currencies and with notably lower wages and incomes than originally expected, making their exports more price-competitive. However, the increasing technical complexity and vertical integration of the U.S. textile industry, combined with several decades of global trade liberalization, will help U.S. cotton farmers continue to find both domestic and foreign customers for their fiber.

Hog Producers Signal Plans To Expand

Hog producers plan to continue increasing production over the next 6 months, according to the September *Hogs and Pigs* report, despite sharply lower hog prices. Large supplies of pork and competing meats have pushed hog prices nearly 40 percent below a year ago. This might have been expected to lead to a decline in farrowings, dampening prospective pork production gains next year. But many producers may be receiving higher prices through carcass quality pricing and forward contracts, and corn and soybean meal prices have declined this year. Consequently, returns to production may have dropped less sharply than the decline in average hog prices would suggest.

Sharp Decline For U.S. Orange Crop

After 2 years of record-setting citrus crops, adverse weather is expected to lower U.S. production 17 percent from last season. Wet and cool conditions have reduced production prospects in California, and wet weather in Florida this past winter followed by drought in the spring stressed orange trees. Florida's citrus crop is expected to drop about 18 percent from last year, with orange production accounting for most of the decline. The orange crop, primarily used for juice, is forecast at 8.6 million tons, down 22 percent from last year. Smaller crops in Florida and in Brazil, the world's other major orange juice producer, could boost grower prices this season, but large beginning stocks will partially offset declines in orange juice production.

Briefs

Livestock, Dairy, & Poultry

Hog Producers Signal Plans To Expand

Hog producers plan to continue increasing production over the next 6 months, according to the September *Hogs and Pigs* report. As of September 1, hog producers indicated they intend to have 2 percent more sows farrowing in September-November than a year earlier, and 3 percent more in December-February than a year earlier. If these September plans are realized, an increase in pork production is assured in 1999. The September-November farrowing intentions are slightly reduced from the 3-percent increase producers indicated last June.

States where large producers dominate, such as North Carolina and Oklahoma, account for most of the increase in December-February farrowing intentions. Several traditional hog producing States also reported increases, including Illinois, Iowa, Michigan, and Ohio.

Pork production is expected to rise about 9 percent this year over 1997. Given the lackluster returns that are expected to continue next year, growth in pork production is expected to slow to about 4 percent in 1999. Although corn and soybean meal prices have plummeted, bringing down costs of feed—the major component of hog production costs—hog prices are nearly 40 percent below a year ago due to large supplies of pork and competing meats.

After about a year of unfavorable returns, producers normally begin to liquidate their breeding herds, leading to reduced sow farrowings and pig crops. The smaller pig crops result in reduced pork production about 6 months after farrowing. The present period of unfavorable returns began in late 1997, which might have been expected to lead to a *decline* in farrowings, dampening prospective pork production gains next year.

Several factors may explain this contrast with the increase in farrowing intentions in the *Hogs and Pigs* report. First, current estimations of producers' costs and returns are based on live-weight price at the time of sale. But since many producers sell on a grade and yield basis (i.e., price is determined by the quality of carcass), they may be receiving an *effective* price higher than the live-weight price. Second, producers who forward contract hogs receive a price based on a pre-negotiated formula usually tied to the futures markets. This year, such pricing raised the effective price received by these producers because producers locked in higher prices before they declined. Finally, current low corn and soybean meal prices pushed break-even prices (based on cash cost) below the hog prices expected by next year. Consequently, returns to hog production may not have dropped as sharply as the decline in average hog prices suggests.

In addition, business planning periods are becoming longer as production units expand. Thus, production plans are based on the outlook for the next several years rather than just the current year.

Increasing supplies of pork and large supplies of poultry will keep hog prices hovering near $30 per cwt next year. But this fall, prices will likely be in the mid- to high-$20's as slaughter hits its seasonal peak. In some weeks, federally inspected slaughter has exceeded 2 million head, near the levels reached in 1994.

Hog prices are expected to average $33-$34 per cwt in 1998, compared with $51 last year. The last time hog prices dropped below this level was in 1972

U.S. Livestock and Poultry Products—Market Outlook

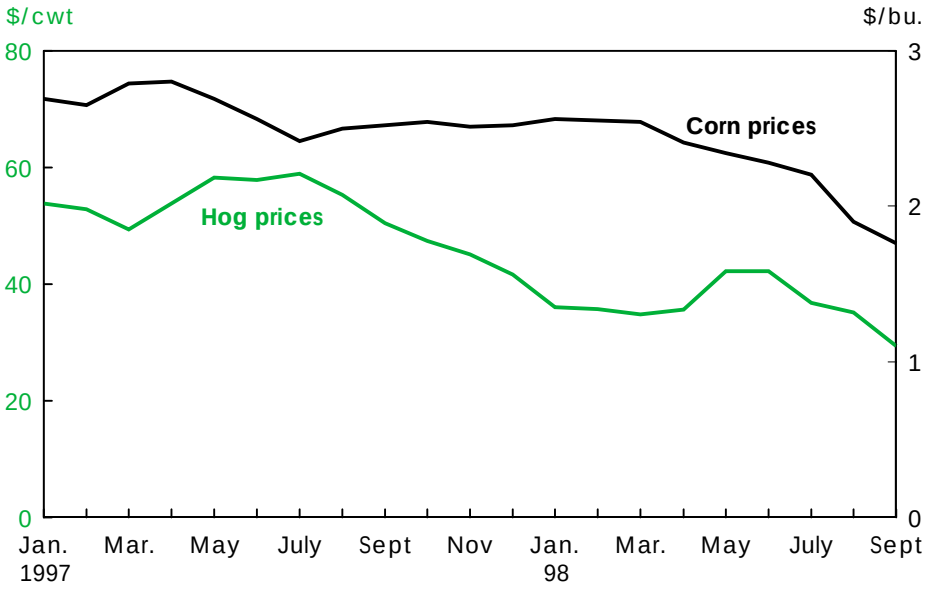
		Beginning stocks	Production	Imports	Total supply	Exports	Ending stocks	Consumption Total	Consumption Per capita	Primary market price
		Million lbs.							*Lbs.*	*$/cwt*
Beef	1998	465	25,719	2,536	28,720	2,110	400	26,210	67.9	61.47
	1999	400	24,031	2,760	27,191	2,155	350	24,706	63.4	69-75
Pork	1998	408	18,772	660	19,840	1,245	475	18,120	52.0	33.87
	1999	475	19,455	700	20,630	1,260	490	18,880	53.7	33-35
										c/lb.
Broilers	1998	607	27,522	5	28,133	4,683	600	22,850	73.5	62.5
	1999	600	28,943	4	29,547	4,525	650	24,372	77.7	56-61
Turkeys	1998	415	5,222	1	5,638	421	350	4,866	18.0	61.7
	1999	350	5,235	1	5,586	430	300	4,855	17.8	60-64
		Million doz.							*No*	*c/doz.*
Eggs*	1998	7.4	6,647.3	5.9	6,660.6	226.2	10.0	5,503.3	244.4	75.9
	1999	10.0	6,790.0	4.0	6,804.0	243.0	10.0	5,581.0	245.7	70-76

Based on October 9, 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

Briefs

Hog Prices Have Dropped, But So Have Corn Prices



Average prices received by producers. September preliminary.
Economic Research Service, USDA

when they averaged $27 per cwt. Prices in 1999 are expected to average about the same as in 1998.

The Bureau of Labor Statistics retail pork price index is expected to decline 5-6 percent in the second half of 1998, after showing a 4-percent decline from a year earlier in the first half of the year. This gradual decline in retail prices is not unusual because declines in farm value take over a year to be passed on to consumers, according to research by USDA's Economic Research Service.

For all of 1998, retail prices are expected to decline about 5 percent. However, if prices were weighted by volume sold (in contrast to a simple average), the average retail price would be lower because a larger proportion of sales occurs when particular cuts are featured.

The abundant supplies of higher value pork cuts will provide consumers an attractive alternative, especially if beef prices rise substantially. Starting late this year, beef production is expected to decline, and year-over-year decreases should continue through 1999. Per capita pork consumption is expected to rise about 7 percent (3 pounds) this year. A 4-percent gain (2 pounds) is expected in 1999.

Lower prices have also boosted pork exports—volume is up over a third during January-July compared with a year ago. For the year, U.S. pork exports are expected to post a double-digit increase, but most of the increase is due to attractive prices of lower value cuts. These products compete with an abundant supply of dark poultry meat products in the international markets.

Reduced prices for lower value cuts, such as picnic hams and trimmings, have provided incentives for low-income countries like Russia and Mexico to more than double their year-over-year purchases. Russia and Mexico account for about 10 and 20 percent of U.S. pork exports. Given the precarious position of developing countries in world capital markets, prospects for maintaining large export volumes—even at very low prices—are questionable. In the second half of 1998, monthly exports to Russia are expected to fall, reflecting that country's financial crisis. U.S. exports to Mexico could also be slowed if tariff-rate quotas are reached.

Strong sales of Canadian hogs to the U.S. have continued. Imports of Canadian hogs are expected to exceed 4 million head this year, up from 3.2 million in 1997. The favorable U.S.-Canadian exchange rate and a 4-percent rise in the September 1 Canadian hog and pig inventory suggest that Canadian hogs are going to continue heading south of the border.

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November Releases—USDA's Agricultural Statistics Board

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

November

2 *Crop Progress (after 4 p.m.)*
3 *Dairy Products*
4 *Broiler Hatchery*
Egg Products
Poultry Slaughter
6 *Cheddar Cheese Prices (8:30 a.m.)*
9 *Crop Progress (after 4 p.m.)*
10 *Cotton Ginnings (8:30 a.m.)*
Crop Production (8:30 a.m.)
12 *Broiler Hatchery*
Turkey Hatchery
13 *Cheddar Cheese Prices (8:30 a.m.)*
Cattle on Feed
Milk Production
Sheep
16 *Crop Progress (after 4 p.m.)*
18 *Broiler Hatchery*
20 *Cheddar Cheese Prices (8:30 a.m.)*
Cold Storage
Farm Labor
Livestock Slaughter
23 *Chickens and Eggs*
Crop Progress (after 4 p.m.)
24 *Catfish Processing*
25 *Cotton Ginnings (8:30 p.m.)*
Broiler Hatchery
Peanut Stocks and Processing
27 *Cheddar Cheese Prices (8:30 a.m.)*
30 *Agricultural Prices*
Crop Progress (after 4 p.m.)

Briefs

Specialty Crops

U.S. Orange Crop To Decline Sharply In 1998/99

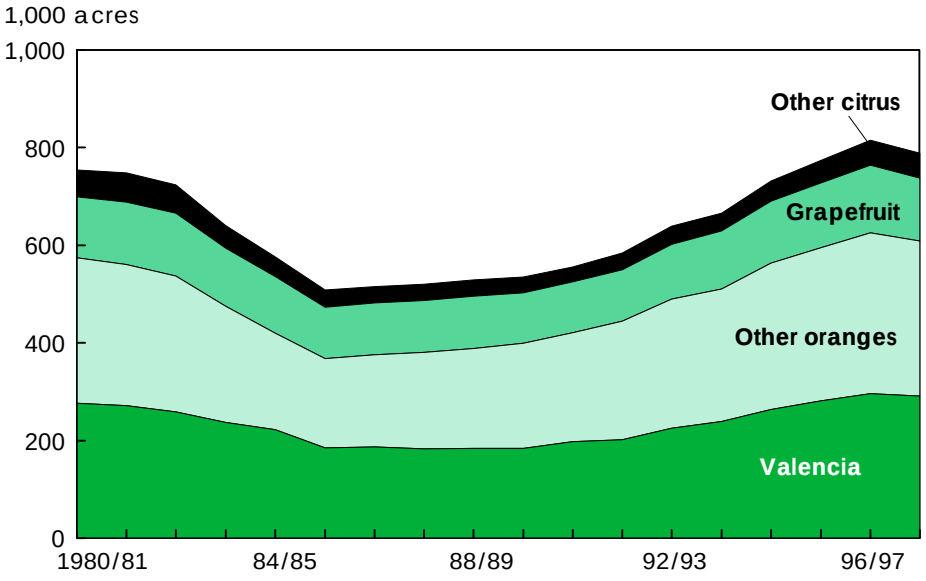
After 2 years of record-setting citrus crops, adverse weather is expected to lower U.S. production to 15 million short tons in 1998/99, down 17 percent from last season. Wet and cool conditions have reduced production prospects in California, and wet weather in Florida this past winter followed by drought in the spring stressed orange trees, reducing fruit set from the previous 2 years. These conditions also slowed crop development in both States, and harvest is expected to begin later than last year.

Despite a 2-percent rise in bearing acreage, the California navel orange crop is forecast 23 percent lower than last year at almost 1.3 million tons and 15 percent below 2 years ago. Smaller fruit size and reduced fruit set are the major factors in the decline in the navel crop (which mostly enters the fresh market through spring). Because consumers generally prefer larger fruit, the smaller fruit size could limit price increases that would otherwise result from the reduced supply. Fresh-market supplies from California will likely be down next summer as well—the California Valencia crop is forecast down 7 percent at 1.05 million tons.

Florida's citrus crop is expected to drop about 18 percent from last year and 16 percent from 1996/97, with orange production accounting for most of the decline. The orange crop, primarily used for juice, is forecast at 8.6 million tons, down 22 percent from last year. A smaller orange crop is also expected in Brazil, the world's other major orange juice producer.

Smaller orange crops in both countries could boost grower prices this season, which could lead to an increase in retail juice prices. However, large beginning stocks in the U.S. (season beginning December) and Brazil (season beginning last July) will partially offset declines in orange juice production.

Florida Citrus Area Halts Expansion After Long Buildup



Bearing acres.

Economic Research Service, USDA

The U.S. grapefruit crop is forecast at 2.63 million tons, up slightly from the final quantity utilized last year but down 9 percent from 1996/97. Larger crops in Florida and Texas are expected to offset smaller crops in California and Arizona. Stagnant demand for grapefruit (both fresh and processed) could push the final utilized production estimate below the current forecast. The size of this year's crop in Florida is expected to put downward pressure on prices for growers, who have experienced depressed prices over the past few years.

Citrus area in Florida has stopped expanding, according to the biennial citrus tree inventory released in early September by the Florida Agricultural Statistics Service. Area had been rebounding after losses from several freezes in the 1980's. As of January 1, 1998, citrus bearing acreage dropped 3 percent from the last survey in 1996 to 787,709 acres, marking the first decline in 11 years.

Since the mid-1990's, flat or declining returns for citrus growers have sharply lowered planting incentives in Florida. The State now has 609,209 bearing acres of oranges, 127,800 bearing acres of grapefruit, and 50,700 bearing acres of specialty citrus such as tangerines, temples, tangelos, and limes.

Grapefruit acreage in Florida declined 8 percent, more than any of the citrus crops. The decrease in acreage of white seedless varieties was greater than for red seedless. The proportion of land planted to red grapefruit varieties has increased throughout the 1990's, reflecting U.S. and European consumer preferences.

Acreage of oranges increased by less than 1 percent since 1996. Despite the minimal acreage gain, the number of orange trees increased 2 percent because newer blocks of trees, especially in the southwestern part of Florida, are planted at a higher density than older plantings. Valencia orange acreage, which accounts for about 48 percent of orange acreage, is up about 2 percent from 1996. Acreage of Hamlins (which rank second) increased 1 percent, and acreage declined for navel, ambersweet, and pineapple orange varieties.

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Commodity Spotlight

U.S. Rice Prices Remain Firm Despite Bumper Supplies

Relatively high prices at planting pulled up U.S. rice area more than 5 percent in 1998 from a year earlier to nearly 3.22 million acres, the second consecutive annual increase. The larger planted area will more than offset a drop in yield to produce the third-largest rice crop on record. Long grain rice (produced mostly in the South) accounts for virtually all of the area expansion; plantings of medium grain (produced mostly in California, Arkansas, and Louisiana) are down substantially.

In both 1997 and 1998, rice prices were relatively high at planting compared with historic rice prices as well as with prices for virtually all alternative crops—primarily soybeans. And while season-average farm prices for corn, wheat, and soybeans were projected last spring to decline in 1998/99, no price drop was projected for rice. In fact, while rice prices have declined only slightly, season-average prices for other grains and for soybeans have dropped substantially since 1996/97.

Producers' initial planting intentions as reported in the *Prospective Plantings* report, released in March, were for 3.06 million acres of rice. However, plantings were revised upward in the June 30 *Acreage* report to nearly 3.22 million acres as strong monthly cash prices continued for rice compared with declining prices during the spring for soybeans, wheat, and feed grains.

The major factor behind the relatively strong U.S. rice prices in 1997/98 was the record level of U.S. rough (unhulled) rice exports, mostly southern long grain. In 1997/98, the U.S. exported a record 26 million cwt of rough rice, more than double a year earlier. Much of this rapid expansion in U.S. rough rice exports is due to El Niño-related production difficulties in Latin America that reduced crops in several importing and exporting countries (*AO* August 1998). For 1998/99, rough rice exports are projected at 24 million cwt, down only slightly from the 1997/98 record.

When the 1996 farm bill was signed, many industry analysts believed U.S. rice plantings would contract since prices were expected to decline. Exports were projected to drop as well with the smaller production. However, world trade has been much larger than expected, raising U.S. prices and keeping U.S. area and exports substantially above the levels projected in 1996.

Rice is produced in Arkansas, California, Louisiana, Texas, Mississippi, and Missouri. Arkansas is the largest rice producing State, accounting for 48 percent of total production in 1998, followed by California. Florida grows a very small amount of rice (not included in production statistics), mostly in rotation with sugarcane.

Strong Prices Drive Area Expansion

While U.S. farm prices have declined since the fall of 1997, they have averaged nearly $9.45 per cwt—relatively high compared with historic rice prices. For example, from 1990/91 through 1994/95, U.S. rice prices averaged only $6.98 per cwt, with prices exceeding $9 in only four months. In February and March—when planting decisions were being made—U.S. monthly cash prices averaged more than $9.60 per cwt.

In fact, U.S. rice prices exceeded $9 per cwt from November 1995 through the end of 1997/98 market year, the longest period of sustained prices at this level since the late 1970's through the early 1980's. The average price during the first 2 months of the 1998/99 marketing year (August-July) was about $9.18 per cwt. The recent price weakness has primarily been due to declining long grain prices, largely a response to expectations of a record long grain crop.

Despite the large crop, U.S. farm prices are projected to remain relatively firm during the 1998/99 marketing year, given expectations of record domestic use, continued strong exports, and smaller ending stocks. The 1998/99 season-average farm price is forecast at $8.75 to $9.75 per cwt, compared with $9.64 for 1997/98. Until the start of 1998/99, virtually all of the price strength for the past 2 years had been for southern long grain rice.

Throughout 1997/98, prices for California medium grain rice remained at least $1.50 per cwt below prices in the South and showed no strength during the year. This was due largely to a record 1997 California crop and weak export demand for U.S. medium grain rice. However, substantially smaller 1998 medium grain

Commodity Spotlight

crops in both California and the South mean that total supplies of medium grain rice will be extremely tight in 1998/99. As a result of expected tight supplies in 1998/99 and recent sales to Japan, California medium grain milled prices have already risen several times since June.

In contrast to the relatively strong rough rice prices, prices for long grain milled rice declined during most of the 1997/98 market year and have continued dropping in 1998/99. In late September, milled prices in Houston dropped to $375 per ton—the lowest in nearly 3 years. Prices had been $408 per ton from early March through mid-August, compared with $463 per ton in early summer 1997. A steady decline in U.S. milled rice exports and a substantial price difference over Thai rice—the major competitor of the U.S. in certain international long grain milled rice markets—during most of the 1997/98 marketing year accounted for much of the drop in U.S. long grain milled prices that year.

Higher Rice Acreage To Offset Lower Yield in 1998/99

	1995/96	1996/97	1997/98	1998/99
			Million acres	
Planted area	3.12	2.82	3.06	3.22
Harvested area	3.09	2.80	3.03	3.19
			Lbs./acre	
Yield	5,621	6,121	5,896	5,696
			*Million cwt**	
Production	173.9	171.3	178.9	181.5
Total supply	212.6	206.3	215.3	219.2
Domestic use	104.6	100.7	102.4	108.9
Exports	83.0	78.4	85.2	84.0
Total use	187.6	179.1	187.6	192.9
Ending stocks	25.0	27.2	27.7	26.3
			$/cwt	
Farm price	9.15	9.96	9.64	8.75-9.75

Marketing year beginning August. 1998/99 forecast.
*Rough-rice equivalent.

Economic Research Service, USDA

Record Long Grain Plantings Offset Lower Yields

Long grain plantings accounted for virtually all of this year's acreage expansion and are projected to rise 10 percent to a record 2.5 million acres. All of the increase is in the South, where nearly all long grain rice is produced. Medium grain plantings are projected to drop almost 10 percent to 689,000 acres, the smallest since 1989. This decline is split evenly between the South and California.

In the South, long grain plantings rose 225,000 acres—or 10 percent—to almost 2.5 million acres. In contrast, medium grain area in the South dropped 35,000 acres—or 13 percent—from 1997 to 237,000 acres. Medium grain plantings account for less than 9 percent of total southern rice plantings in 1998, the smallest share on record.

Generally higher prices at planting for high-quality long grain rice than for medium grain account for most of the shift in southern acreage from medium to long grain. In addition, some disease problems with medium grain varieties in Louisiana in the mid-1990's have contributed to several years of declining medium grain plantings in the State. Low prices at planting and an extremely wet spring that hindered field work and severely delayed plantings accounted for most of the decline in California medium grain acreage.

This year's strong expansion in southern long grain acreage—with Arkansas accounting for the bulk—is also due to the high expected profitability of rice compared with alternative crops—mostly soybeans—given price expectations at planting. For many rice producers, strong prices and high yields (compared with most alternative crops) more than offset the higher costs of rice production. Rice has much higher chemical, custom operations, fuel, fertilizer, and fixed costs than most other field crops.

In contrast to the area expansions in the South, California rice plantings dropped 32,000 acres to 480,000, the smallest acreage in half a decade. All of the decrease was for medium grain.

The national average yield for all rice is forecast at 5,696 pounds per acre, down more than 3 percent from last year and the lowest since 1995. The smaller projected yield is due primarily to expectations of lower yields in California resulting from the late plantings, and severe heat and dryness in most of the South this summer.

The decline is also due partly to a shift in share of total planted acreage from the higher yielding California medium grain rice to the lower yielding southern long grain. California yields are typically a third or more higher than for southern rice, primarily a result of the varieties grown and the climate.

The 1998 U.S. rice crop is projected at 181.5 million cwt, up more than 1 percent from 1997. This is the second year in a row of increasing rice production, as the drop in average yield is more than offset by larger planted area. The long grain crop is projected to rise nearly 10 percent to a near-record 133.2 million cwt, while the medium grain crop is projected to drop more than 16 percent to 46.7 million cwt, the lowest since 1989.

U.S. rice supplies are projected to be 219.2 million cwt, up nearly 2 percent from 1997/98 and second only to the 1994/95 record of 230.9 million cwt. Slightly larger beginning stocks, greater imports, and a bigger crop account for the larger projected supplies.

Food Use To Grow More Slowly, While Exports Remain Strong

Since 1990/91, total domestic use of rice, which has nearly doubled in the past 15 years, has grown an average of more than 3 percent annually. However, this rate has slowed in the past 2 years, and USDA's long-term forecasts (released February 1998) indicated that total domestic use will grow at a little over 2 percent a year over the next 10 years.

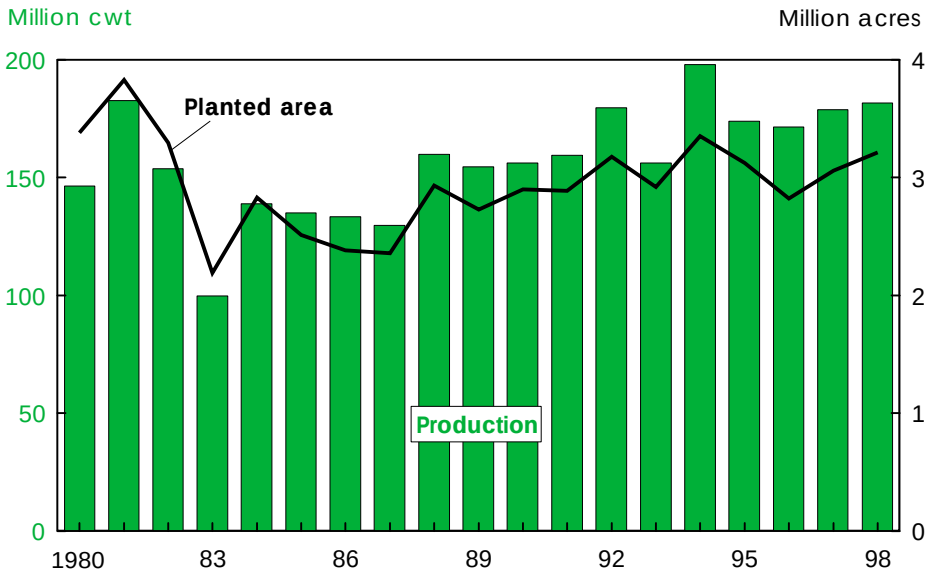
While changing culinary preferences of the U.S. population toward grain-based foods have spurred some of the growth, much of the expanded food use of rice has been due to large increases in the Asian and Hispanic segments of the U.S. population during the last two decades. A large and growing share of this consumption, however, has been supplied by imports of the preferred aromatic rices such as Thai jasmine and basmati from India and Pakistan. Projected total rice imports of 10 million cwt are expected to account for 12 percent of food use.

Total U.S. rice use, including exports as well as domestic use, is forecast at 192.9 million cwt in 1998/99, up 4 percent from a year earlier. Total domestic use (comprised of food use, beer, and seed) is projected at a record 103.4 million cwt, up nearly 2 percent from a year earlier. Food use accounts for all of the expansion, projected at a record 84 million cwt, up 2 million from 1997/98.

U.S. exports are projected at 84 million cwt in 1998/99, down slightly from a year earlier. Rough rice exports, while projected to drop 2 million cwt from last year's record to 24 million, would still be the second highest ever. Large purchases of U.S. rough rice by Brazil last spring for shipment in 1998/99 are behind the robust U.S. rough rice export forecast.

While U.S. rough rice exports have generally been increasing this decade, last year's record and this year's projected near-record shipments are due largely to El Niño-related production difficulties in much of Latin America. Rice crops in both importing and exporting countries in the region were reduced, magnifying the impact on U.S. exports.

U.S. Rice Plantings and Production Up for Second Consecutive Year



Rough-rice basis. 1998/99 preliminary.
Economic Research Service, USDA

Latin American countries generally prefer to import rough as opposed to milled or brown rice. The U.S. is the only major rice exporting country that allows rough rice exports. (Most exporters prefer to ship milled rice to capture value added.) Thus, the U.S. was in a prime position to export large amounts of rough rice when crop shortfalls hit Latin America.

To encourage rough rice imports, nearly all Latin American rice importing countries place a lower tariff on rough than on milled, semi-milled, and brown rice. Mexico and five Central American countries (Costa Rica, Guatemala, Honduras, El Salvador, and Nicaragua) effectively ban imports of Asian rice for phytosanitary reasons. The bans are strongly promoted by local milling associations, as milled rice from Asia can underprice most domestic rice in Central America.

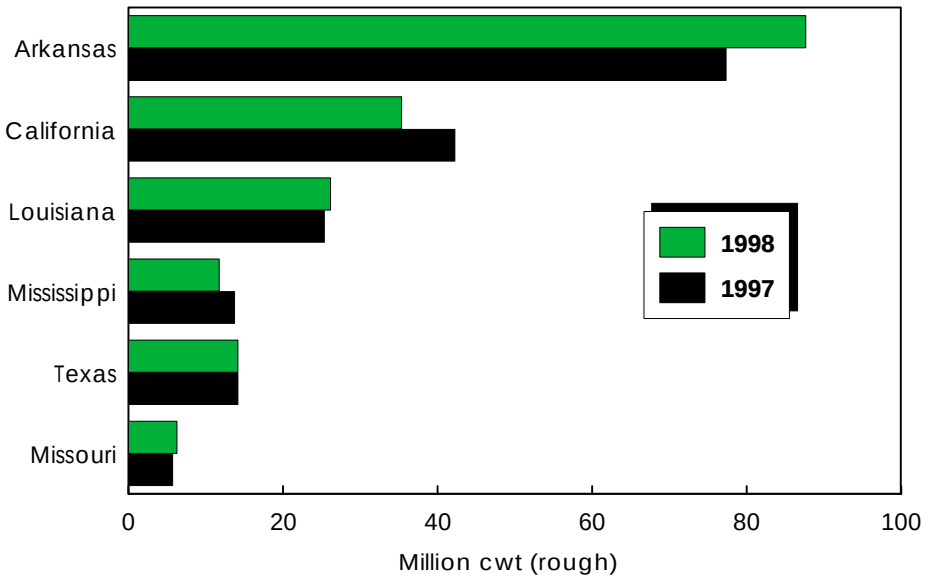
U.S. exports of milled rice are projected to rise nearly 800,000 cwt to 60 million, the first increase since 1994/95. Stiff price competition from Asian exporters in certain high-income markets—mainly the European Union, the Middle East, and South Africa—is a principal reason for the decline in U.S. milled rice exports in recent years. This year's expected increase in milled exports is due to larger projected supplies and slightly lower expected prices.

Latin America, the Middle East, Europe, and Japan are expected to remain important markets for U.S. rice. Latin America is the largest market for U.S. rice exports, taking a record 46 percent on a milled-equivalent basis, nearly all southern long grain. Canada remains a steady U.S. long grain market, with U.S. exports expanding slightly. In recent years the U.S. has lost market share in South Africa and the Middle East, a result of lower priced Asian rice.

U.S. ending stocks are projected at 26.3 million cwt in 1998/99, down almost 5 percent from a year earlier. Stocks as a share of total use are forecast at 13.6 percent, down from 14.7 percent a year earlier and the lowest since 1995/96. Among grain types there are substantial differences in stocks. Expected tight supplies of medium grain rice have terminated the price premium enjoyed by producers of long grain milled rice in the U.S. since August 1996. Combined medium/short grain stocks are projected at 8.8 million cwt, the lowest since 1980/81. In contrast, long grain ending stocks are projected at 16.5 million cwt, the largest since 1992/93.

Commodity Spotlight

Arkansas Accounts for Almost Half of U.S. Rice Production in 1998



1998 projected.

Economic Research Service, USDA

For the 1998/99 crop year, relatively strong world trade and an extremely tight global stocks-to-use ratio will likely limit any major drop in international trading prices. World rice trade in calendar year 1999 is projected at just over 20.4 million tons. While down 4.5 million tons from the 1998 record, trade would still be the third highest on record. However, weak currencies across most of Asia will continue to place downward pressure on international prices.

Internationally traded prices for long grain rice have dropped more than 5 percent since mid-September, due to a lack of new purchases. However, prices are still well above year-earlier levels. Prices had dropped steadily in summer and fall 1997 in response to devaluation of the Thai currency in July. Thailand is the largest rice exporting country, followed by Vietnam. In late 1997, Indonesia and the Philippines began to purchase massive quantities of rice, as both importers faced severe shortfalls in their 1997/98 crops. International prices rose modestly throughout the first half of 1998 in response to record world demand. However, the substantial currency devaluations across much of Asia, and the region's severe financial and economic turmoil, have limited price increases to modest amounts.

Global rice production in 1998/99 is projected to drop more than 2 percent from the 1997/98 record of 385.4 million tons (milled-equivalent basis), a result of weaker crops in several major Asian rice producing countries, particularly China and India. With consumption projected to rise slightly to a record 385.1 million tons, ending stocks will drop nearly 17 percent to 43.4 million tons, the smallest since 1982/83. The stocks-to-use ratio is projected at 11.3 percent, the lowest since 1972/73.

While the global stocks-to-use ratio is projected to be extremely low, several factors indicate that any impact on world trading prices will be small. First, because the bulk of the reduction in stocks is projected to occur in China and India—two exporters—there will be little impact on import demand. Both countries had large stocks going into 1998/99, a result of record 1997/98 crops. Also, while crops in Japan and South Korea are projected smaller in 1998/99, no impact on trade volumes is likely because minimum import levels for both of these countries are fixed by the World Trade Organization and purchases above minimum levels are unlikely given expected stock levels.

Finally, large crops are projected for Thailand, Vietnam, and Pakistan—all major Asian rice exporting countries—and production is projected to rebound in both exporting and importing countries in South American. For the U.S., the larger expected crops in South America will likely limit U.S. rough rice exports and price strength in 1999.

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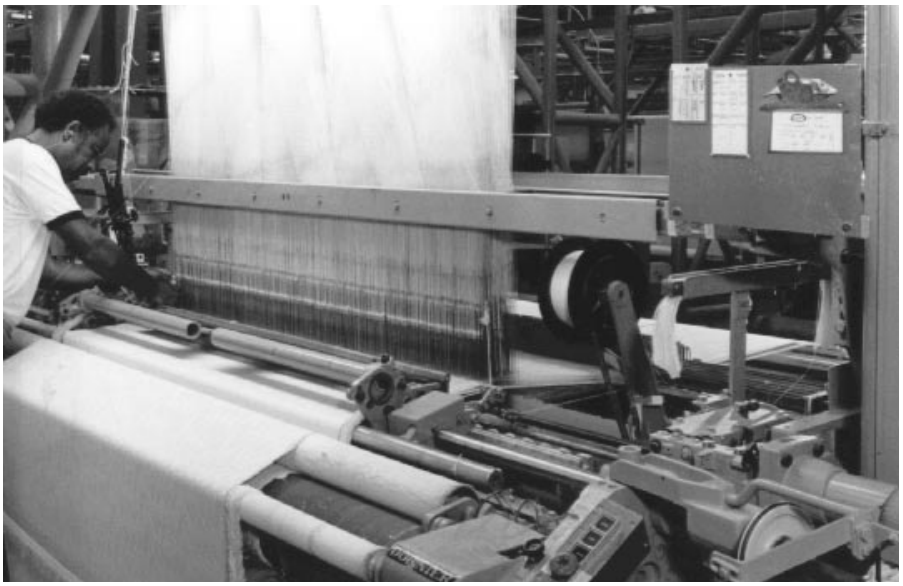


U.S. Cotton Production & Textile Imports Weave New Relationship

U.S. imports of cotton textiles (yarn and fabric) and apparel have been rising during 1998 at twice the average rate of the last decade. In part because of this import surge, U.S. textile mills are expected to use less cotton fiber in 1998/99. The U.S. milling industry purchases domestically produced cotton fiber almost exclusively, and farmers are seeing their best customer reduce its purchases.

At the same time, Asian textile exporters that traditionally ship to the U.S. are now expected to enter the next century with weaker currencies and with notably lower wages and incomes than originally expected, making their exports more price-competitive. Consequently, the coming termination of U.S. textile import quotas in 2005 could have a larger impact on textile trade and cotton production than previously anticipated.

During 1998, the U.S. economy and U.S. dollar have probably been their strongest against the rest of the world since the mid-1980's. In particular, the U.S. economy and currency have strengthened enormously relative to the textile exporting countries affected by the Asian financial crisis. The volume of U.S. textile imports during January-June 1998 compared with a year earlier rose 22 percent. Imports from Thailand, South Korea, and Pakistan rose 40, 30, and 45 percent. Since the system of import quotas originally developed under the Multi-fibre Arrangement (MFA) will largely remain in effect through 2005, the potential for imports from these countries has limits. However, World Trade Organization (WTO) rules schedule a gradual elimination of quota restrictions through termination of selected quotas before 2005 and accelerated increases in quantities for the remaining quotas.

Changes in the nature of the textile industry and in trade policy have altered the structure of world textile trade since the 1980's. The increasing technical complexity and vertical integration of the U.S. textile industry, combined with several decades of global trade liberalization, suggest that U.S. cotton farmers will continue to find both domestic and foreign customers for their fiber despite a continually shrinking U.S. share of apparel sold in the U.S. and worldwide.

Apparel Imports Grow Despite Quotas

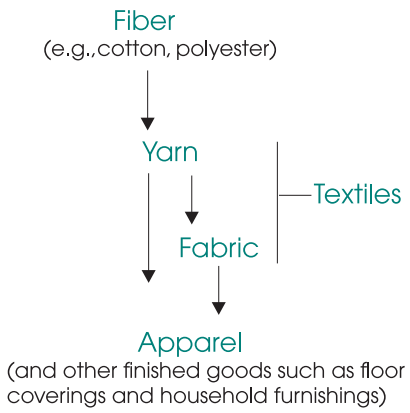
The MFA quotas evolved during the decades before the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), largely in response to surging imports of apparel from developing countries. Although textiles have become increasingly capital-intensive, apparel remains probably the world's most labor-intensive industrial good. Thus, apparel industries in high-wage, developed countries like the U.S. are inevitably vulnerable to competition from developing countries. The MFA quotas reflected this—quota levels and growth rates for apparel were more restrictive than those for yarn and fabric, and apparel quotas to meet WTO obligations are scheduled to terminate later, on average, than yarn and fabric quotas.

Apparel production has steadily migrated to developing countries despite the use of MFA quota restrictions. When these export-oriented apparel industries first appear in developing countries, they are likely to import fabric from more developed countries. Later, fabric production appears, with yarn imported from more developed countries. Finally, a yarn industry develops, and fiber is imported. A number of Asian countries have followed this sequence, beginning with Japan, followed by Taiwan and South Korea, then China and Southeast Asia. Bangladesh is at an intermediate stage—it is just beginning to replace its textile imports with a domestic industry—and Vietnam has only recently begun expanding its apparel exporting industry.

Two generalizations help explain why a growing apparel industry in a developing country has traditionally resulted in a growing textile industry there. One concerns the reduction of transaction costs through vertical coordination between apparel and textile industries sharing a common economic environment.

Since developing countries may accumulate a significant share of their industrial financial and human capital through foreign trade in apparel, a logical application for these new resources is producing a familiar

Transforming Fiber into Finished Goods



product with an assured market—textiles. Domestic textile production means the apparel and textile industries share a common currency and economy, making them less likely to incur the cost of changing customers (for the apparel industry) or suppliers (for the textile industry) during periods of economic disruption. This, along with cultural affinity, can encourage specialized investment within the industry with less risk that foreign firms—or their governments—will later appropriate inordinate shares of profits. Specialization permits economies of scale, and the reduced risk permits greater amounts of such cost-cutting investment.

The other generalization is that developing countries have traditionally pursued policies that favor nascent capital-intensive industries, even at the expense of existing labor-intensive ones. Their underlying premise has been that by increasing the amount of capital available per member of the labor force, the wages and well-being of the population will increase. To this end, developing countries have tended to subsidize capital, lowering the cost of developing a capital-intensive textile industry to supply the already existing local apparel firms. Also, trade policies have assured that effective rates of tariff protection for textile products have been high—often in excess of 100 percent.

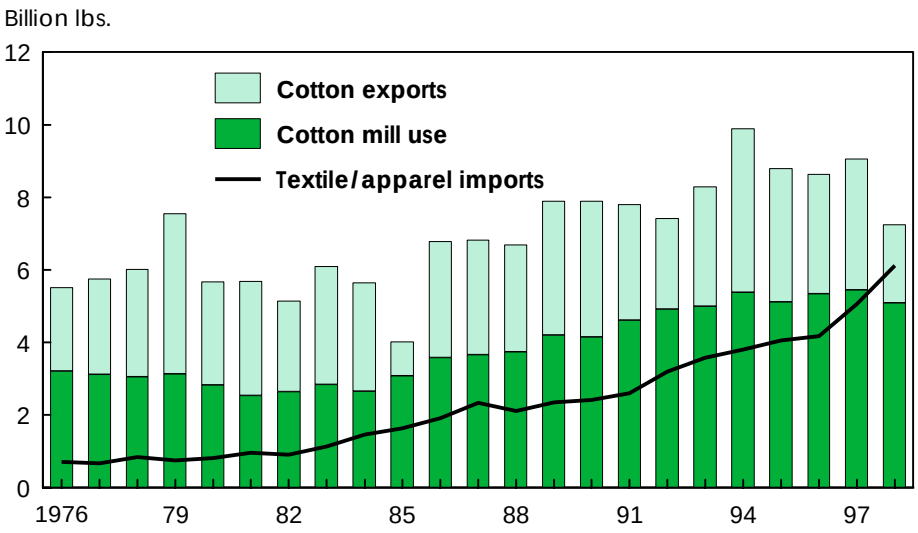
While firms exporting apparel products have had widespread access to duty-free textile imports, this access has not always been consistent. Quantitative restrictions, credit restrictions, and duty prepayments, among other methods, have been used to restrict imports. Moreover, sudden policy changes have also occurred. During the 1970's, for example, Indonesia assessed import duties on the basis of assumed prices rather than invoices, to avoid the underinvoicing inspired by currency controls. In 1975, the assumed prices on textiles were raised 75 percent. In contrast, Indonesia operated concessionary exchange rates for raw cotton and cotton yarn to facilitate its imports when the country's currency was overvalued.

Under these circumstances, the shift of apparel production out of a developed country like the U.S. has eventually resulted also in the shift of the initial fiber-consuming segment of the industry—yarn production. A continuation of this trend could have negative implications for U.S. cotton farmers since foreign yarn producers utilize a lower share of U.S. fiber than do domestic yarn producers. Indeed, during the 1970's and early 1980's, as the U.S. share of world cotton yarn production fell, the U.S. share of cotton fiber production fell as well. However, technical change and restructuring in the U.S. textile and apparel industry, and a global trend toward trade liberalization, mean these older relationships are not likely to exert as strong an influence.

U.S. Cotton: Fiber for a Restructuring Industry

Under competition from imports, and in response to the opportunities provided by the North America Free Trade Agreement (NAFTA) and the Caribbean Basin Initiative, the U.S. textile and apparel industry has become more amenable to undertaking foreign direct investment (FDI) and exporting from the foreign plants, two strategies that tend to preserve U.S. fiber consumption despite growing apparel imports. Attrition in the U.S. apparel industry has fallen more heavily on

Total Use of U.S. Cotton Has Trended Up Despite Rising Imports of Textiles and Apparel



Calendar years for imports. (1998 is annualized January-June data); marketing years beginning August 1 for use (1998 forecast); fiber equivalent. Cotton production was down sharply in 1998 due to lower yields (adverse weather) and acreage (including abandonment).

Economic Research Service, USDA

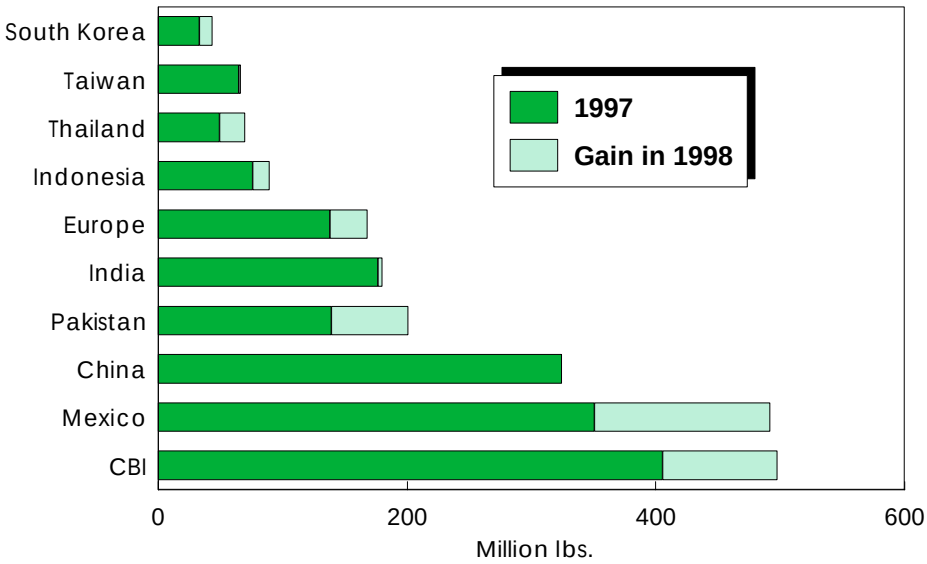
smaller firms, leading to an increase in the average firm's capital and knowledge intensity, making it more likely for the firm to engage in FDI or in outward processing. Firms engaged in outward processing of apparel perform only the most capital-intensive steps—like cutting fabric—in the developed country and contract the labor-intensive steps—such as sewing—to a developing country.

Vertical integration has proceeded since the 1980's to a greater extent in the U.S. industry than elsewhere, and a company that pursues vertical integration domestically is likely to pursue it globally. The same efforts to capture profits from intangible capital (e.g., brand loyalty, technical expertise) occur across borders as well as within the home country of the vertically integrated firm. Thus, with vertical integration, the capital-intensive production would more likely remain in the firm's home country than would be the case if the steps were performed by different firms, even as the labor-intensive steps are moved to low-wage countries.

These developments have not been confined to the U.S. Relatively greater rates of vertical integration and FDI are longstanding attributes of Japan's textile industry, and outward processing trade between Europe and Eastern Europe has also increased. Poland has become the second-largest market for the European Union's fabric (after the U.S.), resulting in a reduced cotton fabric trade deficit for the EU. Tunisia and Morocco are also important EU outward processing points.

Trade liberalization may reduce developing countries' ability to limit imports from developed countries. While it is possible for developing countries with balance-of-payments problems to maintain quantitative restrictions on trade and remain in conformity with WTO provisions, the trend has been toward reducing such barriers. By not subsidizing and protecting capital-intensive industries, developing countries can more effectively exploit their comparative advantage in producing labor-intensive goods. This would imply importing capital-intensive intermediate products, and under conditions of general global liberalization of trade and investment, such new patterns are emerging.

U.S. Increased Imports of Cotton Textiles and Apparel from Most of Its Suppliers in 1998



January-June. CBI=Carribean Basin Initiative. China figures include Hong Kong.
Economic Research Service, USDA

During the first half of 1998, Mexico was the largest source of textile and apparel imports to the U.S.—surging 40 percent from January to June—with a group of Caribbean Basin countries (led by Honduras and the Dominican Republic) the second largest, rising 23 percent. U.S. *exports* of textiles to these regions also rose substantially, and virtually all of the cotton fiber used by their industries was U.S.-origin. Liberalization of textile trade with Mexico and, to a lesser extent, the Caribbean Basin, has permitted increased FDI by U.S. companies and domestic investment by Mexican, Caribbean, and Central American firms oriented to using U.S. cotton.

In 1997, Asia accounted for less than half of all U.S. cotton textile and apparel imports, compared with 65 percent in 1993. North America (including Mexico and the Caribbean Basin) accounted for 37 percent of all U.S. cotton textile imports, compared with 19 percent in 1993. This textile trade shift can be quantified in terms of U.S.-produced cotton fiber, based on earlier research by USDA's Economic Research Service on the amount of U.S.-sourced cotton fiber embodied in textile and apparel imports. In 1993, nearly 2.1 billion pounds of cotton textiles and apparel were imported by the U.S. from the 10 largest import sources, and about 26 percent of that was returning U.S.-produced fiber. During 1997, 3.1 billion pounds were imported from the 10 largest sources, and nearly 40 percent was returning U.S. fiber.

Forecasting developments in location of textile production requires careful examination of each country's domestic investment, changing industry structure, and changing international trade policies. With potentially large shifts in apparel production after 2005, this examination will be crucial in foreseeing the international distribution of textile production.

During most of the 20th century, increased foreign apparel production also pulled textile production into countries that utilized a higher proportion of non-U.S. fiber, reducing prospects for U.S. cotton growers. However, a continuation of more recent trends in industrial organization and trade policy could mean textile trade rather than production follows shifting apparel production, sustaining cotton production in the U.S.

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Environmental Policy & the WTO: Unresolved Questions

The need of countries to protect their environment and to conserve natural resources does not fit neatly into the free market framework that underpins the Uruguay Round Agreement (URA) on Agriculture. Under the URA, participating nations are required to reduce the level of domestic support for agriculture as well as agricultural trade barriers. Unless carefully designed with economic forces in mind, environmental policies can effectively alter production and price levels and thereby affect trade patterns.

The World Trade Organization (WTO)—the institution that enforces URA rules—recognizes that environmental protection is a legitimate policy goal. When environmental policies affect agricultural production and trade only minimally, such policies are permitted by the WTO to be exempt from the country's commitments to reduce support to agriculture, under the "green box" exemption.

Policies that qualify for the green box exemption must not support prices or increase consumer costs, and must be financed by the federal government. Additionally, green box environmental programs must limit subsidies to the farmers' extra cost of complying, prices and production cannot be factors in green box land retirement programs, and land must be retired for a minimum of 3 years.

With criteria for green box designation already defined, discussions between now and the conclusion of the WTO mini-round on agriculture scheduled to begin in late 1999 may address a number of unresolved questions. These include how to assess tradeoffs between environmental protection and trade distortion and how to interpret "*minimal* trade-distorting effects."

The Rationale for Green Box Environmental Policies

In the U.S., numerous environmental and natural resource policies are designed to limit the damage caused by agricultural activities. These policies—frequently implemented through a partnership between Federal and State governments—are directed at a diverse range of problems that include:

- *surface water* pollution attributable to agricultural production, including runoff from crop and livestock operations;
- *loss of wetlands* that otherwise improve water quality, reduce soil erosion, conserve surface water, improve subsurface moisture, contribute to flood control, enhance natural beauty, and provide habitat for migratory waterfowl and other wildlife;
- *soil erosion* which diminishes recreation activities, increases costs of water treatment and dredging of navigation channels, silts up drainage and irrigation channels, and causes the sedimentation of reservoirs; and,
- *improper management of land*, which ultimately harms the environment through sedimentation, pollution of surface waters, and loss of highly productive and unique soil.

A free market framework may not effectively protect the environment and conserve scarce natural resources. For instance, when the private benefits of conservation practices are small, farmers and ranchers may contribute to unsustainable patterns of natural resource use and environmental degradation that is excessive from a public perspective. Such "market failures" are unlikely to be self-correcting, and the WTO acknowledges that environmental protection and natural resource conservation are legitimate public activities.

Environmental and natural resource green box policies rely on a mix of instruments such as technical assistance, cost-sharing, rental and easement payments, and conservation research and development. In the U.S., green box expenditures on rental and easement payments have increased in relative importance since 1985 compared with expenditures of cost-share programs for conservation practice applications. Most rental payments are administered through the Conservation Reserve Program (CRP) for land taken from production and turned into protective cover. Through the Environmental Quality Incentives Program (EQIP), producers implementing structural practices (e.g., animal waste management facilities, terraces, and filterstrips) receive up to 75 percent of the projected cost through cost-share agreements with the Government or receive incentive payments for adopting management practices for conservation purposes.

These policies can affect production levels, prices, and patterns of trade. If large

enough, land retirement programs can reduce production for specific commodities. In 1995, 9.4 percent of total cropland in the U.S. was idled under the CRP. Although the CRP aims to retire environmentally sensitive cropland, it may generate output effects. USDA's Economic Research Service has shown that environmentally sensitive land might not be economically marginal in terms of production potential.

Green box programs such as the EQIP can also affect costs through the introduction of more environmentally benign technologies which might not have been adopted in the absence of government cost-share programs. If new technologies are adopted on a large scale, they can potentially affect production, prices, and trade. Programs such as the CRP and EQIP are presumed to have minimal trade distorting effects, and are thereby eligible for WTO's green box exemption.

Questions for the Upcoming WTO Mini-Round

How will the tradeoffs between environmental protection and trade distortion be assessed?

A sound evaluation of tradeoffs is needed to determine eligibility for inclusion in the WTO's green box. Otherwise, national governments could use the green box exemption to further protectionist goals or to affect the terms of trade.

Environmental cost-benefit analysis can be used to evaluate the economic effects of green box policies. Data on indicators of environmental quality or degradation and on economic values of environmental quality changes are needed to implement this technique. But because markets for attributes of environmental quality may not exist, it is difficult to assign monetary values to environmental quality changes within a country.

Also, environmental quality changes in one country may be valued differently by consumers in other countries, further complicating the assignment of monetary values. For example, trade barriers may be erected to prevent imports of genetically modified crops, which are believed to enhance environmental quality in the

Selected Green Box Environmental Programs

USDA-Administered Programs

- ***Environmental Quality Incentives Program (EQIP)***—Through use of technical assistance, education, cost-sharing, and incentive payments, EQIP assists farmers and ranchers in adopting management techniques that reduce nonpoint surface and groundwater pollution. Fiscal 1998 appropriated funding: $200 million.
- ***Conservation Reserve Program (CRP)***—Since 1987, the CRP has reduced annual erosion by one-fifth by providing rental payments to agricultural producers who retire environmentally sensitive cropland. Fiscal 1998 expenditures: $1.8 billion.
- ***Conservation Technical Assistance (CTA)***—Technical assistance for farmers and ranchers who implement soil and water conservation and water quality improvement. Fiscal 1998 appropriated funding: $ 541.7 million.
- ***Farmland Protection Program (FPP)***—The FPP allocates funds for purchase of conservation easements and other types of interests in land that has prime, unique, or other highly productive soils. USDA spent $18 million in fiscal 1998.
- ***Wetland Reserve Program (WRP)***—The WRP assists landowners in returning farmed wetlands to their original condition through easement payments and restoration cost-shares. Fiscal 1998 appropriated funding: $218.5 million.
- ***Emergency Conservation Program (ECP)***—The ECP provides financial assistance to farmers recovering from natural disasters and conserving water during periods of severe drought. Fiscal 1998 appropriated funding: $34 million.
- ***Wildlife Habitat Incentives Program (WHIP)***—The WHIP promotes voluntary implementation of on-farm management practices to improve wildlife habitat. Fiscal 1998 appropriated funding: $30 million.
- ***Conservation Farm Option (CFO)***—The CFO is a pilot program for eligible producers that consolidates payments from environmental programs into a single payment in exchange for implementing practices to protect soil, water, and wildlife. Fiscal 1998 authorized funding: $15 million, reduced to $11 million by supplemental appropriations.

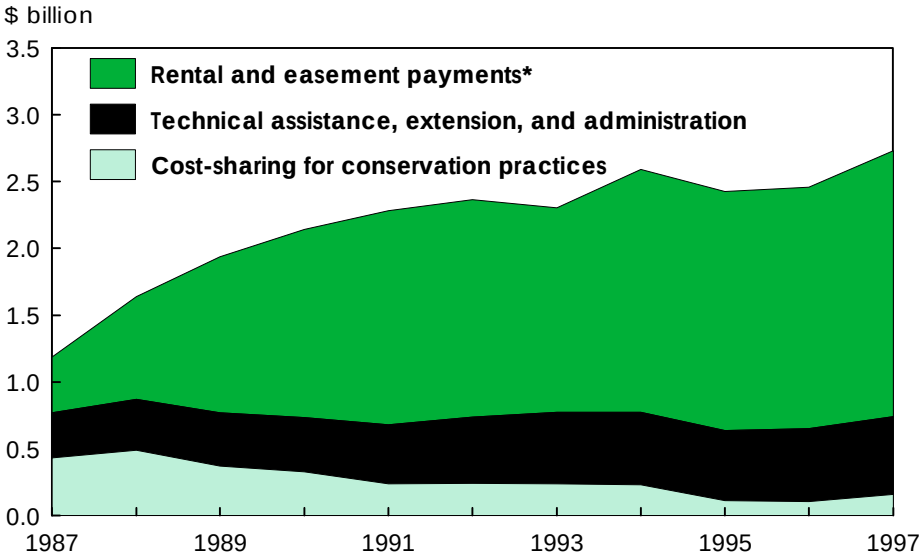
Environmental Protection Agency-Administered Programs

- ***Nonpoint Source Program***—Established by Section 319 of the Clean Water Act, this program provides States with program guidance, technical support, and limited funding to establish nonpoint source pollution management plans. Fiscal 1998 operating plan budget: $119.3 million.
- ***Coastal Zone Management Act Reauthorization Amendments (CZARA)***—States with an approved coastal zone management program were required to submit to the Environmental Agency before July 1995 a program that outlines management measures for nonpoint source pollution to restore and protect coastal waters. Implementation of plans is not required until 1999.
- ***Wellhead Protection Program***—Authorized by the Safe Drinking Water Act, this program protects groundwater supplies used as public drinking water from contamination by agricultural chemicals, including pesticides and nutrients. Fiscal 1998 operating plan budget: $12.1 million.

State-Administered Programs

- ***Water Quality Improvement Programs***—Some 44 States have passed laws or instituted programs to protect water quality. States use a variety of approaches to address water quality problems, including economic incentives, education programs, controls on inputs and practices, and controls on land use.

Rental and Easement Payments Account for Most U.S. Green Box Expenditures



*E.g., Conservation Reserve Program and Wetland Reserve Program.
Economic Research Service, USDA

exporting country (by reducing chemical inputs in some cases) but not in the importing country (due to concerns about the technology in general). Such difficulties may limit the WTO's capacity to determine whether the environmental benefits supplied by a green box policy justify the costs of trade distortion.

Once countries submit domestic policies supposedly falling into the green box, how will the WTO decide which policies are legitimate?

Because certain environmental and natural resource conservation green box policies allow for small changes in production, a country may have an incentive to use domestic policy to increase its competitiveness on the world market (e.g., paying livestock producers for maintaining open landscapes). And while failure to adhere to most requirements of the green box is fairly easy to detect, the meaning of "minimal trade-distorting effects" is open to interpretation.

In some instances, environmental and natural resource policies are used to correct for pre-existing market failures (e.g., idling highly erodible land that would otherwise be used for production). In these cases, the actual effectiveness of such policies depends on their ability to reallocate resources in a way that results in *more than minimal* trade effects. An open question is whether placement of such policies in the green box will be permitted.

Will the WTO limit the scope of environmental subsidies?

Agriculture provides important environmental services while curtailing others. On the positive side, farmers who maintain certain wetlands help improve water quality and provide floodplain areas to lessen flooding damages. Wetland preservation may also protect wildlife. Agricultural production may result in carbon sequestration (i.e., in soil), helping to reduce greenhouse gas concentrations. Providing environmental amenities such as rural landscapes is another example.

But agricultural activities also contribute sediment, nutrients, pesticides, and potentially, pathogens to water resources, possibly impairing drinking water, recreation, navigation, and other water uses. Wetlands have been converted to agricultural use.

An issue for the WTO is the extent to which nations may provide support for producers to provide amenities or to prevent impairments to the environment. If a country subsidizes agriculture for supplying environmental services, criteria have yet to be settled upon for determining the legitimacy of such claims.

Should developing countries be treated in the same way as developed countries?

As a result of funding capabilities and preferences, developed countries typically spend proportionally more on funds for environmental and natural resource policies than their less developed counterparts. In reality, many of the environmental and resource problems faced by developing countries are more severe. Still at issue is whether less developed countries should be allowed greater flexibility in expenditures on environmental and resource policy.

Future discussion on the green box must tackle some of these issues. Otherwise, some countries could use the green box exemption to further a protectionist trade agenda or to manipulate the terms of trade in their favor.

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Special Article

China's Livestock Sector Growing Rapidly

China is among the world's largest producers and consumers of animal proteins. Although current per capita consumption of animal proteins is lower in China than in wealthier nations, it is increasing rapidly as China's economy and personal incomes grow. China has the potential to become a growing market for feedstuffs or animal protein imports, as demand for meats, fish, eggs, and milk is expected to outstrip domestic feedgrain supplies.

Because of the sheer size of China's livestock sector, relatively small changes in either livestock inventory growth or meat demand trends can have important implications for projections of global trade in feedstuffs or animal proteins. China is already the world's largest consumer of most livestock meat products. However, due to China's relatively low income levels, per capita animal protein intake remains much lower than its neighbors'. For example, citizens of South Korea eat 5 times as much animal protein per capita as those of China, Japan 7 times, Taiwan 9 times. Per capita animal protein intake in the U.S. is 11 times greater.

China's per capita consumption is influenced partly by differences between urban and rural consumption of meat products. Policy measures that encouraged urban meat consumption have resulted in two very different animal protein consumption patterns. Urban per capita consumption of almost all the different protein products are double or triple that of rural residents.

Pork accounts for half of all the animal protein consumed by China's residents. Partly because of government policies discouraging pork production to favor more efficient animal protein operations, pork's share of total meat consumption fell from 86 percent in 1980 to 76 percent in 1996. Per capita consumption at home increased 63 percent in rural areas but rose little in urban areas.

Poultry meat and eggs contribute 26.5 percent of consumer animal protein intake. As per capita at-home consumption tripled (from 0.76 to 2.44 kilos) in the last 15 years, poultry meat's share in total meat consumption doubled, from 7.2 percent in 1980 to 14.2 percent in 1996. Per capita at-home consumption of eggs increased from 2.04 kilos to 5.03 kilos.

Beef, mutton, and milk account for only a small share of China's total animal protein consumption, but their shares have been increasing. Beef's share of total meat consumption rose from 2.5 percent in 1980 to 5 percent in 1996, as per capita at-home consumption tripled. Consumption of mutton and goat meat rose slightly from 4.2 percent to 4.4 percent of total meat consumption, while per capita at-home consumption doubled from 0.4 kilos per person in 1980 to 0.9 kilos in 1996. Milk accounts for only 0.2 percent of total animal protein consumption, and per capita consumption of milk in 1996 remained very low at 1.8 kilos.

Frederick W. Crook

Protein from fish accounts for 15.8 percent of animal protein consumption, but per capita at-home consumption of *aquatic products* in general is still low, despite increasing from 1.8 kilos in 1980 to 4.6 kilos in 1996.

Policy Changes Boost Production

Animal protein demand has been satisfied primarily from domestic output, which has grown dramatically during the last 10 years. Between 1986 and 1996, China's total animal product output reportedly tripled, from 38.1 to 118.3 million tons. However, recent research implies that the reported growth is exaggerated, suggesting that China's production was overstated during much of the 1990's and was understated during the 1980's.

Nonetheless, there is no doubt that livestock output has grown rapidly in the last decade. Since 1980, reform policies emphasizing market incentives and reducing or limiting government intervention have stimulated rapid growth in China's meat production. The government reduced control over livestock production and marketing, and followed this with reduced controls over oilseed products and other feed ingredients. Controls on grain production and marketing also influence the livestock sector. Farmers are required to sell a fixed quantity of grain to government-owned grain stations at a fixed quota price, but can choose among several outlets for any additional grain they produce. They may sell more grain to the government grain station at market or support prices, sell the grain at local open market prices, or feed the grain to livestock and later sell their animals or animal products at local markets.

Special Article

Problems in Measuring China's Livestock Sector

Over the past decade, researchers at USDA's Economic Research Service have identified a number of analytical issues and anomalies associated with China's animal protein economy that make it difficult to assess the current situation as well as future trends in either livestock inventories or feed grain demand. Because of the size of China's population, small changes in per capita animal protein consumption lead to relatively substantial changes in projections of China's future demand for feedstuffs. Similarly, because of the enormous livestock inventory in China, relatively small changes in feed/meat conversion ratios lead to large changes in feedstuff use projections. In addition, government production, marketing, and foreign trade policies continue to have an important effect on the livestock economy, and policy changes add additional uncertainty in producing projections.

A number of inconsistencies exists in the data describing this economy. For example, the quantity of grain used for feed reported in China's grain balance sheets is insufficient to support current reported livestock production. This suggests that either the feed/meat conversion rates are far more efficient than is likely, grain output is underreported, livestock production is overreported, or a combination of these possibilities. There is also a contradiction between growth in grain supplies and in livestock product output. Livestock product output has grown at about 5 percent per annum even when available grain supplies grew slowly, declined, or were stagnant.

Researchers in China and the U.S. have observed that per capita meat availability as measured by Government production and population statistics is roughly 50 percent larger in 1996 than per capita meat consumption as measured by the State Statistical Bureau (SSB) urban and rural household income and expenditure surveys. Scholars in China have questioned this growing gap.

Most researchers agree that some animals slaughtered have been double counted and that in some cases, local cadres inflated output statistics to earn better performance evaluations. Work is now underway at ERS to address the implications of a reduction in China's official meat production statistics on its projected future grain import demand.

China's State Statistical Bureau (SSB) recently began conducting sample surveys on livestock inventories. Results from the surveys and from China's first agricultural census (completed in January 1997) will provide useful benchmarks. In the latest *China's National Economic and Social Development Communique*, published on March 5, 1998, the SSB confirmed the problem of overreporting by revising red meat output downward by about 20 percent. However, China has not yet released revised detailed individual meat production or animal inventory numbers.

China's statistical officials have indicated that a revised historical series of detailed meat and animal inventory statistics will likely be released by China's State Statistical Bureau sometime in 1999. SSB officials are currently working on developing an appropriate methodology for re-estimating the individual historical data series. Once that is determined, the revised historical data series will have to be reviewed by other relevant government agencies (particularly the Ministry of Agriculture) before it is officially released.

Given the acknowledged problems in China's livestock data, the assessments in this article should be viewed as tentative. Despite the uncertainties, however, there is no doubt that livestock product markets in China are significant to world markets, and their importance is likely to become much greater in the future.

Frequent changes in government grain policies have been a leading factor in the variability of livestock output over the past few decades, a condition that is likely to continue into the next decade. Driven by rising concern that China's domestic feed grain and protein meal output may not meet rapidly increasing demand, the government is currently supporting feed-efficient livestock production, particularly poultry, fish, and grass-fed ruminant operations, while reducing support for less efficient pork producers.

Pork remains by far the largest component of China's livestock production sector, though its position is declining. Currently published data suggest production between 1980 and 1996 increased substantially, although overreporting has produced uncertainty in the pork output series. Constraints on feed grain supplies are likely to slow future growth of China's pork output. The structure of pork production has changed as output has gradually shifted from individual farm households using traditional technology (from 95 percent of output in the mid-1980's to about 80 percent in 1996) to specialized livestock-producing households and commercial firms applying modern technology. The largest potential future gains in feeding efficiency will come from continued modernization of the pork sector.

Poultry production increased rapidly between 1980 and 1996, although data on poultry meat and egg production are less reliable than other livestock data because such a large proportion of the birds are produced by individual farm households, rather than in specialized operations. Egg output grew dramatically from 2.6 million tons in 1980 to 19.5 million in 1996; poultry meat output grew from 1.9 million tons in 1986 to 10.7 million in 1996.

Growth in poultry and egg output is expected to remain strong, though less rapid than in the previous 15 years. Production growth was stimulated not only by general market-oriented policy reforms, but also by direct government support for such projects as specialized poultry breeding operations. Government plans call for continued support of the poultry industry, but

China Is a Leading Producer of Animal Protein

	China		U.S.	
	World rank	Output quantity	World rank	Output quantity
		1,000 metric tons		
Pork	1	42,500	2	8,609
Beef	3	5,400	1	11,714
Mutton	1	2,600	13	118
Poultry meat	2	11,500	1	14,945
Fish	1	27,300	5	5,900
Milk	18	7,650	2	71,150
		Million pieces		
Eggs	1	336,000	2	77,520

Sources: USDA PS&D database, April 1998. Data on fish from UN Food and Agriculture Organization.

future growth will depend on changes in per capita income and relative prices among competing sources of animal protein.

Beef production rose sixfold between 1980 and 1996. More efficient use of crop residues in intensive crop-growing regions contributed to the rapid growth, but statistics may overstate actual growth over the last decade. Because cattle were treated in the communist accounting framework as a "means of production" (for draft use, rather than for meat) and were collectively owned until the early 1980's, beef consumption was discouraged and limited, creating a tendency to underreport beef cattle before the early 1980's. The expansion of more efficient feeding practices is expected to boost production in the coming decade. Ammoniation, for example, by adding anhydrous gas or liquid ammonia to high-cellulose-content crop residues, increases the crude protein and digestible energy levels in the feed, as well as increasing animal feed intake. Beef output is likely to increase more slowly than in the past, however, because of consumer preferences for other meats.

Mutton and goat meat output more than quadrupled between 1980 and 1996. A large part of the increase came from expansion in intensively cropped areas in eastern China, the result of government policies supporting more efficient feeding of crop residues. Such policies are expected to continue in the coming decade and should further stimulate production in intensively cropped areas.

China's consumers do not have a long or well established tradition of consuming *dairy products*, but dairy output has expanded dramatically from 1.4 million tons in 1980 to 7.4 million in 1996, primarily supplying increased urban demand for milk. Tighter feed grain supplies over the next decade will likely reduce the rate of growth, since limited pasture makes dairy production in China particularly grain-intensive. A portion of increasing domestic demand for dairy products such as nonfat dry powdered milk will likely be met through imports.

The most rapid growth of all animal protein products in China was in *aquatic product* output, which rose from 4.5 million tons in 1980 to 32.9 million in 1996, making China the world's largest producer. Prospects for the coming decade are mixed. While the Government has invested heavily in equipment to increase the ocean catch, world fish resources are declining and traditional fishing nations are increasingly conscious of overfishing and damage to marine ecosystems.

China hopes to expand domestic aquaculture systems because fish are very efficient converters of grain and oilseed meals to meat. However, water shortages in North China and environmental problems in South China pose constraints to continued rapid expansion. Only moderate output growth is expected in the coming decade.

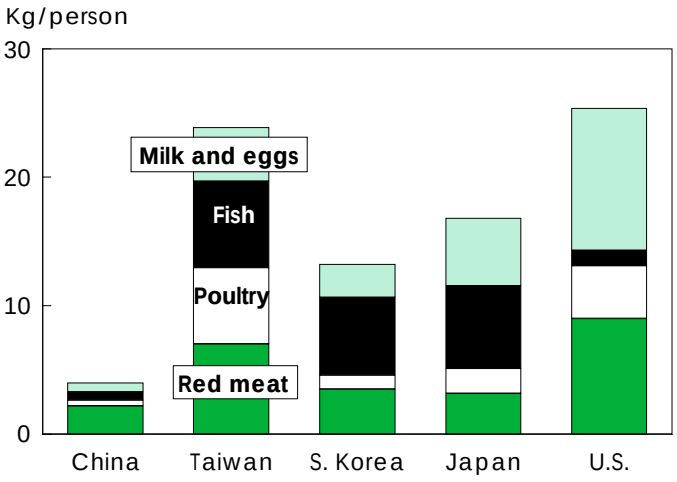
Trade May Fill Production Gaps

Several USDA studies of China's agricultural economy from 2005 to 2025 forecast that production of feed grains and oilseed meals will increase through time, but that demand for feed and oil meals will outpace supplies and the supply/demand gap will widen. China will almost certainly continue to encourage producers to implement efficiency measures to save on increasingly scarce feed supplies.

Government-supported programs to accelerate the growth of the poultry, aquatic, and grass-fed bovine animal industries are among the strategies already in place. Although pork remains the preferred meat in China, the price for pork may rise relative to other meats unless China is able to increase grain and oilseed production to meet domestic feed requirements. A relative increase in the pork price vis-a-vis other animal protein products will induce consumers to switch to other products.

Government policies have severely limited China's trade in livestock products. A strategy of grain self-sufficiency limited the growth of domestic livestock production in past decades, while a

The Mix of Animal Protein Consumption Varies By Country



1995 data from urban and rural household surveys for China and from food balance sheets for other countries.

Economic Research Service, USDA

Special Article

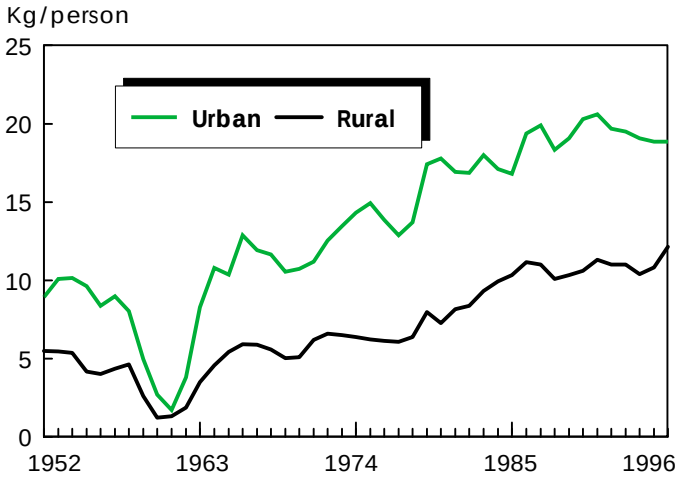
strategy of meat self-sufficiency restricted imports of livestock products. China uses tariff-rate quotas, value-added taxes, and health and sanitary requirements to limit meat imports. China's meat exports face similar barriers in other countries as well as bans against China's meat products because of the existence of Newcastle and foot-and-mouth diseases. Thus trade accounts for a very small share of China's livestock economy. In 1996, China exported about 1 percent of its livestock products and imported a similar amount.

Despite these limitations, China is a major importer of poultry parts which have high domestic demand—particularly legs, wings, and feet—and is a major exporter of poultry parts—primarily breasts—to other Asian countries. China currently exports feed grain (primarily corn), although it is expected to gradually return to being a net corn importer. China is also a major world importer of soybeans and soymeal to support domestic livestock production and is expected to require increasing amounts of protein meal imports in the future. Even though China achieves a fairly high percentage of self-sufficiency in grain production, even a small percentage shortfall leads to large imports because of China's enormous population.

In the next decade China may increasingly look to international markets for additional sources of feedstuffs or meats, as well as for export opportunities. China will likely continue to import some animal parts for which internal prices are high because of strong domestic demand, such as chicken wings and feet, and export animal parts for which domestic demand and internal price are low. China is preparing to join the World Trade Organization (WTO), and meat trade issues—e.g., comparative production advantages, sanitary and phytosanitary problems, and human health concerns—have been discussed within China.

China sees other benefits in exporting meat products as well. Its trade strategy allows for import of a portion of animal feeds to be transformed internally into value-added meat products, which are then to be exported back onto the world market. China is continuing to strengthen its export markets in Hong Kong and Macao and is looking for opportunities to increase sales to neighboring Japan, the Newly Independent States of the former Soviet Union, Indonesia, and the Middle East.

Urban Outpaces Rural Per Capita Pork Consumption in China



Source: *China's Livestock Statistics: 1948-89;* estimates by Economic Research Service and China's State Statistical Bureau for 1990-96.

Economic Research Service, USDA

China's population will continue to grow, although the rate is projected to slow from 1 percent in 1996 to 0.7 percent in 2005, and large numbers of rural residents are expected to continue to migrate to urban centers over the next few decades. Increasing overall population and rural-to-urban migration is expected to foster continued rapid growth in demand for animal products. Demand for meats, fish, eggs, and milk in the future is likely to outstrip China's ability to produce these products using its own feed crops. Despite its measures to increase feed efficiency, China has the potential to become a large market for imported animal protein foods and/or feedstuffs.

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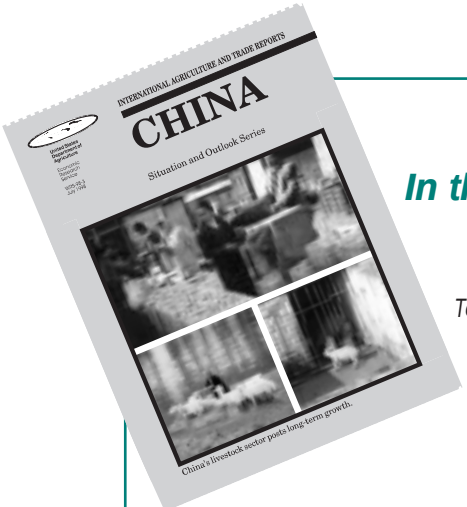

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Statistical Indicators

Summary Data

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

				1997	1998			1999	
	1997	1998 F	1999 F	IV	I	II	III	IV	I	II
Prices received by farmers (1990-92=100)	107	--	--	106	102	103	--	--	--	--
Livestock & products	98	--	--	97	94	96	--	--	--	--
Crops	115	--	--	113	110	112	--	--	--	--
Prices paid by farmers (1990-92=100)							--	--	--	--
Production items	117	--	--	116	115	114	--	--	--	--
Commodities and services, interest,	117	--	--	117	117	116	--	--	--	--
taxes, and wages							--	--	--	--
Cash receipts ($ bil.)[1]	209	198	--	64	49	43	48	58	--	--
Livestock	97	94	--	25	23	23	24	24	--	--
Crops	112	104	--	39	26	21	24	34	--	--
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	163	163
At home	158	160	163	159	160	160	161	160	163	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	44,851	43,815	11,167	11,038	11,015	11,400	11,398	10,846	10,788
Poultry (mil. lb.)	33,258	33,566	35,045	8,383	8,258	8,453	8,380	8,475	8,435	8,895
Eggs (mil. doz.)	6,460	6,647	6,790	1,667	1,637	1,635	1,660	1,715	1,665	1,675
Milk (bil. lb.)	156.6	157.3	161.0	38.2	39.2	40.9	38.7	38.6	39.7	41.5
Consumption, per capita										
Red meat and poultry (lb.)	208.6	213.7	214.9	53.9	51.7	52.3	53.9	55.7	52.6	53.3
Corn beginning stocks (mil. bu.)[3]	425.9	883.2	1,307.8	2,496.6	883.2	7,246.8	4,939.9	3,039.8	--	--
Corn use (mil. bu.)[3]	8,849.5	8,950.9	9,350.0	1,617.1	3,004.2	2,307.8	1,903.7	--	--	--
Prices[4]										
Choice steers--Neb. Direct ($/cwt)	66.32	61.47	69-75	66.61	61.73	64.16	59.00	60-62	68-72	71-77
Barrows and gilts--IA, So. MN ($/cwt)	51.36	33.87	33-35	43.53	34.74	39.42	33.33	27-29	32-34	35-37
Broilers--12-city (cents/lb.)	58.80	62.50	56-61	54.00	56.40	61.00	70.40	61-63	56-60	57-61
Eggs--NY gr. A large (cents/doz.)	81.20	75.90	70-76	88.20	79.00	66.50	76.00	80-84	72-78	62-68
Milk--all at plant $/cwt)	13.34	15.15-	13.60-	14.53	14.60	13.73	15.23	17.00-	14.65-	12.90-
		15.25	14.50					17.40	15.35	13.90
Wheat--KC HRW ordinary ($/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	6.39	--	--	--	--
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 ye indicated. 3. Sept.-Nov. first quarter; Dec.-Feb. second quarter; Mar.-May third quarter; Jun.-Aug. fourth quarter; Sept.-Aug. annual. Use includes expo and domestic disappearance. 4. Simple averages, Jan.-Dec. 5. 1990-98 values as of January 1. 1989 values as of February

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
	Billions of current dollars (quarterly data seasonally adjusted at annual rates)									
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	8,440.6
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	8,421.8
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	5,773.7
Durable goods	608.5	634.5	673.0	638.2	658.4	659.9	681.2	682.2	705.1	720.1
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	1,655.2
Food	735.1	756.1	780.9	766.6	775.5	775.8	785.3	787.1	796.9	810.2
Clothing and shoes	254.7	264.3	278.0	266.2	275.2	275.6	280.9	280.7	291.0	295.3
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	3,398.4
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	1,345.0
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	1,305.8
Change in business inventories	30.1	25.9	67.4	31.9	66.1	83.5	54.6	71.9	95.5	39.2
Net exports of goods and services	-86.0	-94.8	-93.4	-88.6	-98.8	-86.8	-94.7	-98.8	-123.7	-159.3
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	1,481.2
	Billions of 1992 dollars (quarterly data seasonally adjusted at annual rates) [1]									
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	7,498.6
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	7,485.9
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	5,130.2
Durable goods	583.6	611.1	668.6	617.1	637.8	653.8	679.6	684.8	710.3	729.4
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	1,540.9
Food	690.5	689.7	699.3	689.0	694.6	697.3	700.6	699.9	706.8	716.3
Clothing and shoes	257.5	267.7	288.4	270.0	277.1	283.3	291.9	292.3	307.4	311.4
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	2,866.8
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	1,306.5
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	1,264.1
Change in business inventories	27.3	25.0	63.2	32.9	63.7	79.0	51.0	66.5	91.4	38.2
Net exports of goods and services	-98.8	-114.4	-136.1	-105.6	-126.3	-131.6	-142.4	-149.0	-198.5	-245.2
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	1,294.8
GDP implicit price deflator (% change)	2.3	1.9	1.9	1.8	2.8	1.6	1.2	1.2	0.8	0.9
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	5,988.9
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	5,321.5
Per capita disposable pers. income ($)	20,050	20,840	21,633	21,127	21,391	21,558	21,709	21,871	22,046	22,192
Per capita disp. pers. income (1992 $)	18,640	18,989	19,349	19,096	19,217	19,315	19,385	19,478	19,632	19,719
U.S. resident population plus Armed Forces overseas (mil.)[2]	263.0	265.5	267.9	266.4	266.9	267.5	268.1	268.9	269.3	269.9
Civilian population (mil.)[2]	261.4	263.9	266.4	264.9	265.4	266.0	266.6	267.3	267.8	268.4
		Annual		1997			1998			
	1995	1996	1997	Aug	Mar	Apr	May	Jun	Jul	Aug
	Monthly data seasonally adjusted									
Total industrial production (1992=100)	116.0	120.2	127.0	127.9	130.8	131.6	131.7	129.9	129.5	132.0
Leading economic indicators (1992=100)	100.8	102.0	103.8	104.0	105.2	105.3	105.2	105.0	105.5	105.5
Civilian employment (mil. persons)[3]	124.9	126.7	129.6	129.7	131.0	131.4	131.5	131.2	131.1	131.2
Civilian unemployment rate (%)[3]	5.6	5.4	4.9	4.9	4.7	4.3	4.3	4.5	4.5	4.5
Personal income ($ bil. annual rate)	6,072.1	6,425.2	6,784.0	6,826.7	7,033.9	7,055.3	7,085.9	7,104.4	7,134.2	7,172.1
Money stock-M2 (daily avg.) ($ bil.)[4]	3,651.2	3,826.1	4,045.8	3,957.4	4,133.9	4,167.2	4,177.6	4,196.1	4,212.7	4,242.1
Three-month Treasury bill rate (%)	5.51	5.02	5.07	5.13	5.03	5.00	5.03	4.99	4.96	4.94
AAA corporate bond yield (Moodyís) (%)	7.59	7.37	7.27	7.22	6.72	6.69	6.69	6.53	6.55	6.52
Total housing starts (1,000)[5]	1,354.1	1,476.8	1,474.0	1,383	1,585	1,546	1,538	1,620	1,706	1,613
Business inventory/sales ratio[6]	1.43	1.40	1.38	1.38	1.38	1.39	1.39	1.38	1.38	--
Sales of all retail stores ($ bil.)[7]	2,346.3	2,465.1	2,546.3	216.4	221.1	222.7	225.5	225.6	224.2	224.2
Nondurable goods stores ($ bil.)	1,405.6	1,457.8	1,505.4	126.8	128.5	129.3	130.4	130.3	131.0	131.0
Food stores ($bil.)	408.4	424.2	432.1	35.9	36.4	36.6	36.8	36.9	37.0	37.3
Apparel and accessory stores ($ bil.)	109.5	113.0	116.8	10.1	10.4	10.5	10.4	10.3	10.5	10.5
Eating and drinking places ($ bil.)	239.9	238.4	244.1	19.8	20.3	20.3	20.5	20.5	20.4	20.4

-- = 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
	Real GDP, annual percent change									
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
	Consumer prices, percent change									
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.

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Farm Prices

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

	Annual			1997	1998					
	1995	1996	1997	Sep	Apr	May	Jun	Jul	Aug	Sep
					1990-92=100					
Prices received										
All farm products	102	112	107	107	104	103	102	102	101	98
All crops	112	126	115	114	115	113	107	107	104	100
Food grains	134	157	128	126	112	109	96	89	85	86
Feed grains and hay	112	146	117	114	109	108	105	101	91	83
Cotton	127	122	112	115	103	105	113	110	109	108
Tobacco	103	105	104	101	97	--	--	94	93	102
Oil-bearing crops	104	128	130	111	112	112	111	111	98	93
Fruit and nuts, all	100	118	109	130	102	110	124	131	142	131
Commercial vegetables	120	109	120	118	156	128	108	122	111	112
Potatoes and dry beans	107	114	93	88	106	112	105	104	93	93
Livestock and products	92	99	99	99	95	95	98	96	98	97
Meat animals	85	87	92	92	84	87	86	79	78	73
Dairy products	98	114	102	100	107	101	107	108	118	124
Poultry and eggs	107	120	114	116	109	107	115	121	132	128
Prices paid										
Commodities and services,										
interest, taxes, and wage rates	110	115	116	117	116	116	115	115	114	113
Production items	109	115	116	117	114	114	113	112	111	110
Feed	104	130	122	124	111	108	105	106	101	97
Livestock and poultry	82	75	93	96	94	91	88	83	83	80
Seeds	110	115	119	120	123	123	123	123	123	123
Fertilizer	120	124	121	119	114	115	115	114	112	111
Agricultural chemicals	115	119	121	120	122	121	122	122	122	123
Fuels	94	105	103	110	91	94	88	85	83	80
Supplies and repairs	112	115	117	118	119	119	118	119	119	119
Autos and trucks	107	108	109	118	119	118	118	118	118	118
Farm machinery	120	125	128	130	132	132	132	132	132	132
Building material	114	115	118	118	118	118	118	118	119	119
Farm services	118	118	118	118	116	116	117	118	117	117
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	130	130	130	125	125	125
Production items, interest, taxes, and wage rates	109	114	116	117	115	115	114	113	113	111
Ratio, prices received to prices paid (%)*	93	98	92	91	90	89	89	89	89	87
Prices received (1910-14=100)	647	712	679	678	662	656	650	645	643	625
Prices paid, etc. (parity index) (1910-14=100)	1,437	1,504	1,527	1,562	1,528	1,522	1,536	1,528	1,519	1,507
Parity ratio (1910-14=100) (%)*	45	47	45	43	43	43	43	42	42	41

-- = 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 USDAís 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	Sep	Apr	May	Jun	Jul	Aug	Sep
Crops										
All wheat ($/bu.)	4.55	4.30	3.45	3.66	3.15	3.06	2.77	2.56	2.39	2.37
Rice, rough ($/cwt)	9.15	9.96	9.64	9.85	9.30	9.41	9.51	9.57	8.95	9.40
Corn ($/bu.)	3.24	2.71	2.60	2.52	2.41	2.34	2.28	2.20	1.90	1.76
Sorghum ($/cwt)	5.69	4.17	4.00	3.99	3.76	3.71	3.96	3.80	3.32	3.02
All hay, baled ($/ton)	82.20	95.80	102.50	100.00	101.00	103.00	91.80	88.60	88.50	86.50
Soybeans ($/bu.)	6.72	7.35	6.50	6.72	6.26	6.26	6.15	6.13	5.43	5.15
Cotton, upland (¢/lb.)	75.40	69.30	66.90	6.94	62.20	63.50	68.50	66.50	66.20	65.20
Potatoes ($/cwt)	6.77	4.93	5.68	5.09	6.17	6.52	6.04	5.93	5.30	5.31
Lettuce ($/cwt)[2]	23.50	14.70	17.30	22.30	27.90	14.70	11.40	15.40	16.20	15.20
Tomatoes fresh ($/cwt)[2]	25.80	28.00	33.00	25.20	36.50	34.70	27.00	40.80	20.40	23.60
Onions ($/cwt)	11.10	10.60	12.60	10.30	21.70	18.50	15.90	21.30	15.10	12.90
Beans, dry edible ($/cwt)	20.80	23.50	17.70	16.30	20.80	21.10	21.30	21.40	19.80	18.80
Apples for fresh use (¢/lb.)	24.00	20.80	22.20	25.90	19.20	18.20	16.30	16.10	19.00	22.70
Pears for fresh use ($/ton)	272.00	376.00	276.00	368.00	292.00	373.00	353.00	405.00	457.00	420.00
Oranges, all uses ($/box)[3]	4.23	5.01	4.57	7.15	5.82	5.68	6.41	5.85	5.37	4.97
Grapefruit, all uses ($/box)[3]	2.30	2.43	1.74	4.22	1.36	0.42	3.58	3.66	6.01	11.09
Livestock										
Cattle, all beef ($/cwt)	61.80	58.70	63.10	63.60	63.00	63.00	61.80	58.40	57.40	55.80
Calves ($/cwt)	73.10	58.40	78.90	86.90	90.80	88.90	81.70	76.60	76.90	73.80
Hogs, all ($/cwt)	40.50	51.90	52.90	50.40	35.60	42.20	42.20	36.70	35.10	29.40
Lambs ($/cwt)	78.20	88.20	90.30	90.20	66.10	63.30	88.70	81.00	79.90	--
All milk, sold to plants ($/cwt)	12.78	14.75	13.36	13.10	14.00	13.20	14.00	14.10	15.40	16.20
Milk, manuf. grade ($/cwt)	11.79	13.43	12.17	12.70	12.10	11.30	13.00	14.00	14.60	15.30
Broilers, live (¢/lb.)	34.40	38.10	37.70	38.20	36.50	36.90	40.30	43.20	46.90	45.90
Eggs, all (¢/doz.)[4]	62.40	74.90	70.20	69.60	63.50	54.80	60.00	58.30	64.90	63.40
Turkeys (¢/lb.)	41.00	43.30	39.90	41.10	35.70	35.40	35.90	37.50	38.80	40.20

-- = 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	Sep	Apr	May	Jun	Jul	Aug	Sep
					1982-84=100					
Consumer Price Index, all items	152.4	156.9	160.5	161.2	162.5	162.8	163.0	163.2	163.4	163.6
CPI, all items less food	153.1	157.5	161.1	161.8	163.0	163.3	165.3	163.6	163.9	164.1
All food	148.4	153.3	157.3	157.9	159.8	160.3	160.1	160.5	161.0	161.1
Food away from home	149.0	152.7	157.0	157.8	160.2	160.6	160.7	161.1	161.5	162.1
Food at home	148.8	154.3	158.1	158.6	160.2	160.7	160.5	160.8	161.4	161.2
Meats[1]	135.5	140.2	144.4	145.6	140.8	141.0	141.5	141.8	142.2	141.6
Beef and veal	134.9	134.5	136.8	137.2	136.5	136.3	136.3	136.1	137.0	136.3
Pork	134.8	148.2	155.9	158.9	145.9	147.6	148.7	149.7	149.9	148.7
Poultry	143.5	152.4	156.6	156.8	154.3	155.6	155.5	156.6	158.9	159.3
Fish and seafood	171.6	173.1	177.1	176.5	181.0	180.9	180.5	181.4	183.5	181.5
Eggs	120.5	142.1	140.0	136.9	139.1	128.6	126.3	127.5	135.4	132.4
Dairy products[2]	132.8	142.1	145.5	143.5	148.5	148.1	148.1	148.2	150.5	152.9
Fats and oils[3]	137.3	140.5	141.7	142.0	140.7	141.2	143.3	147.6	149.7	152.4
Fresh fruits	219.0	234.4	236.3	243.9	241.6	249.0	247.3	247.4	248.7	247.6
Processed fruits	137.1	145.2	148.8	148.5	--	--	--	--	--	--
Fresh vegetables	193.1	189.2	194.6	189.5	219.7	229.7	214.7	214.0	205.6	200.1
Potatoes	174.7	180.6	174.2	191.7	179.9	187.7	193.1	196.5	192.7	189.1
Processed vegetables	138.3	143.9	147.2	146.8	--	--	--	--	--	--
Cereals and bakery products	167.5	174.0	177.6	178.1	180.2	180.5	181.6	181.8	182.7	181.9
Sugar and sweets	137.5	143.7	147.8	148.5	150.1	149.5	150.5	149.9	150.2	150.8
Nonalcoholic beverages[4]	131.7	128.6	133.4	136.7	133.9	132.9	132.8	132.3	132.0	132.2
Apparel										
Apparel, commodities less footwear	129.3	128.5	129.4	129.6	--	--	--	--	--	--
Footwear	125.4	126.6	127.6	127.4	127.9	128.3	128.2	127.0	127.7	128.6
Tobacco and smoking products	225.7	232.8	243.7	246.5	263.5	270.0	266.9	273.2	273.7	283.5
Alcoholic beverages	153.9	158.5	162.8	163.5	165.2	165.2	165.5	165.6	165.7	166.3

-- = Not available. 1. Beef, veal, lamb, pork, and processed meat. 2. Includes butter. 3. Includes butter as of Jan í98. 4. Includes fruit juices as of Jan. í98.
This table is compiled with data provided by the Bureau of Labor Statistics (BLS). BLS operates a website at http://stats.bls.gov/blshome.html and a Consumer Prices Information Hotline at (202) 606-7828.

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

	Annual			1997	1998					
	1995	1996	1997	Sep	Apr	May	Jun	Jul	Aug	Sep
					1982=100					
All commodities	124.8	127.7	127.6	127.5	124.9	125.1	128.4	124.8	124.2	123.9
Finished goods[1]	127.9	131.3	131.8	131.8	130.4	130.6	130.6	130.9	130.6	130.6
All foods[2]	126.7	132.5	132.8	132.6	132.0	130.0	131.8	132.5	132.8	133.5
Consumer foods	129.0	133.6	134.5	134.7	133.8	133.6	133.6	134.6	135.0	135.4
Fresh fruits and melons	85.7	100.8	99.4	93.4	90.3	92.3	89.6	88.7	90.2	90.9
Fresh and dry vegetables	144.4	135.0	123.1	125.0	167.8	134.2	120.9	146.6	116.4	130.8
Dried and dehydrated fruits	121.2	124.2	124.9	125.7	122.5	127.4	127.4	127.4	125.6	125.6
Canned fruits and juices	129.4	137.5	137.6	136.2	134.1	134.1	133.8	134.6	134.4	134.2
Frozen fruits, juices and ades	115.9	123.9	117.2	114.8	112.2	115.3	115.4	117.5	116.3	116.5
Fresh veg. except potatoes	139.8	120.9	121.3	121.8	162.9	123.2	106.5	153.7	114.9	135.0
Canned vegetables and juices	116.6	121.2	120.1	119.3	121.8	121.9	121.9	122.2	123.1	122.6
Frozen vegetables	124.2	125.4	125.8	125.7	125.7	125.0	125.3	125.6	125.6	125.3
Potatoes	142.6	133.9	106.1	148.3	125.5	136.3	120.4	116.0	106.5	147.5
Eggs for fresh use (1991=100)	86.3	105.1	97.1	100.1	83.6	71.2	86.9	80.8	91.3	88.9
Bakery products	164.3	169.8	173.9	174.3	175.7	175.8	175.7	175.6	176.0	175.5
Meats	102.9	109.0	111.6	112.5	101.2	105.5	105.9	102.9	104.5	100.4
Beef and veal	100.9	100.2	102.8	104.0	99.2	103.5	99.9	99.5	100.8	98.3
Pork	101.4	120.9	123.1	123.5	96.1	104.2	111.2	100.8	104.8	96.1
Processed poultry	114.3	119.8	117.4	118.6	117.2	116.5	119.6	124.9	127.3	129.4
Unprocessed and packaged fish	170.9	165.9	178.1	169.7	185.8	186.4	178.3	180.0	180.4	178.4
Dairy products	119.7	130.4	128.1	127.1	131.4	131.3	132.8	135.3	139.4	145.1
Processed fruits and vegetables	122.4	127.6	126.4	125.3	125.3	125.7	125.8	126.4	126.5	126.3
Shortening and cooking oil	142.5	138.5	137.8	136.6	142.6	145.1	141.8	141.5	137.3	142.5
Soft drinks	133.1	134.0	133.2	132.9	135.3	134.6	134.5	134.7	134.8	134.8
Finished consumer goods less foods	123.9	127.6	128.2	128.6	126.0	126.7	126.8	127.0	126.4	126.3
Alcoholic beverages	128.5	132.8	135.1	134.1	135.0	134.9	134.9	134.9	134.9	135.0
Apparel	124.2	125.1	125.7	125.9	126.5	126.5	126.3	126.0	126.3	126.3
Footwear	139.2	141.6	143.7	144.4	144.7	144.6	144.7	144.4	145.0	144.7
Tobacco products	231.3	237.4	248.9	256.4	271.0	278.4	278.7	278.7	286.4	287.3
Intermediate materials[3]	124.9	125.8	125.6	126.0	123.3	123.5	123.4	123.4	123.1	123.0
Materials for food manufacturing	119.5	125.3	123.2	123.1	121.7	123.7	122.9	122.6	123.3	124.6
Flour	122.8	136.8	118.7	118.0	112.7	112.4	109.0	107.8	104.0	102.8
Refined sugar[4]	119.4	123.7	123.6	122.6	119.5	119.2	122.3	120.3	119.9	120.7
Crude vegetable oils	129.8	118.1	116.6	112.7	138.9	143.7	130.6	126.3	120.4	131.4
Crude materials[5]	102.7	113.8	111.1	108.5	100.3	100.5	98.5	97.1	94.6	92.9
Foodstuffs and feedstuffs	105.8	121.5	112.2	110.6	105.8	106.2	105.6	103.8	103.0	100.9
Fruits and vegetables and nuts[6]	108.4	122.5	115.5	112.8	128.4	116.2	109.4	119.0	108.0	114.1
Grains	112.6	151.1	111.2	107.2	99.8	98.7	93.8	91.4	82.8	77.3
Slaughter livestock	92.8	95.2	96.3	95.8	87.9	90.7	90.7	81.8	82.1	79.0
Slaughter poultry, live	125.6	140.5	131.0	139.9	128.5	131.1	140.5	156.7	167.8	164.1
Plant and animal fibers	155.3	129.4	117.0	118.3	101.5	107.9	117.9	120.9	115.8	117.8
Fluid milk	93.7	107.9	97.5	97.0	101.4	98.1	100.5	107.0	114.2	119.8
Oilseeds	112.6	139.4	140.8	130.2	118.1	121.0	115.9	120.5	104.6	101.2
Leaf tobacco	78.9	89.4	--	103.2	99.6	--	--	--	93.8	104.1
Raw cane sugar	119.7	118.6	116.8	118.3	117.5	118.1	118.1	119.3	118.4	116.0

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	Sep	Apr	May	Jun	Jul	Aug	Sep
Market basket[1]										
Retail cost (1982-84=100)	149.4	155.9	159.7	160.0	161.8	162.7	162.2	162.6	163.4	163.2
Farm value (1982-84=100)	102.7	111.1	106.2	105.2	103.4	103.4	102.7	103.0	103.3	103.1
Farm-retail spread (1982-84=100)	174.6	180.1	188.6	189.6	193.2	194.7	194.3	194.7	195.8	195.6
Farm value-retail cost (%)	24.1	24.9	23.3	23.0	22.4	22.2	22.2	22.2	22.1	22.1
Meat products										
Retail cost (1982-84=100)	135.5	140.1	144.4	145.6	140.8	141.0	141.5	141.8	142.2	141.6
Farm value (1982-84=100)	93.8	100.4	101.2	100.5	86.9	91.4	93.4	89.1	85.4	81.3
Farm-retail spread (1982-84=100)	178.2	180.9	188.6	191.9	196.1	191.9	190.9	195.9	200.4	203.5
Farm value-retail cost (%)	35.1	36.3	35.5	34.9	31.3	32.8	33.4	31.8	30.4	29.1
Dairy products										
Retail cost (1982-84=100)	132.8	142.1	145.5	143.5	148.5	148.1	148.1	148.2	150.5	152.9
Farm value (1982-84=100)	92.2	107.2	98.0	94.0	106.1	105.5	103.4	103.2	113.9	120.1
Farm-retail spread (1982-84=100)	170.3	174.3	189.3	189.2	187.6	187.4	189.3	189.7	184.3	183.1
Farm value-retail cost (%)	33.3	36.2	32.3	31.4	34.3	34.2	33.5	33.4	36.3	37.7
Poultry										
Retail cost (1982-84=100)	143.5	152.4	156.6	156.8	154.3	155.6	155.5	156.6	158.9	159.3
Farm value (1982-84=100)	113.7	126.2	120.6	124.2	116.2	117.2	126.6	135.3	145.9	143.9
Farm-retail spread (1982-84=100)	177.7	182.6	198.1	194.3	198.1	199.9	188.8	181.2	173.9	177.1
Farm value-retail cost (%)	42.4	44.3	41.2	42.4	40.3	40.3	43.6	46.2	49.1	48.3
Eggs										
Retail cost (1982-84=100)	120.5	142.1	140.0	136.9	139.1	128.6	126.3	127.5	135.4	132.4
Farm value (1982-84=100)	91.1	114.7	99.3	99.0	85.2	67.0	77.2	74.2	88.3	85.2
Farm-retail spread (1982-84=100)	173.2	191.4	213.0	205.0	235.8	239.2	214.6	223.2	220.0	217.1
Farm value-retail cost (%)	48.6	51.9	45.6	46.5	39.4	33.5	39.2	37.4	41.9	41.4
Cereal and bakery products										
Retail cost (1982-84=100)	167.5	174.0	177.6	178.1	180.2	180.5	181.6	181.8	182.7	181.9
Farm value (1982-84=100)	110.1	125.6	107.7	106.3	99.2	97.3	92.5	88.7	84.8	84.7
Farm-retail spread (1982-84=100)	175.5	180.7	187.4	188.1	191.5	192.1	194.0	194.8	196.4	195.5
Farm value-retail cost (%)	8.1	7.2	7.4	7.3	6.7	6.6	6.2	6.0	5.7	5.7
Fresh fruit										
Retail cost (1982-84=100)	226.9	243.0	245.1	255.6	249.9	258.8	256.6	255.7	259.2	260.6
Farm value (1982-84=100)	136.2	151.7	137.0	147.2	140.4	138.6	135.7	132.3	136.0	139.5
Farm-retail spread (1982-84=100)	268.7	285.2	295.0	305.6	300.5	314.3	312.4	312.7	316.0	316.5
Farm value-retail cost (%)	19.0	19.7	17.7	18.2	17.7	16.9	16.7	16.3	16.6	16.9
Fresh vegetables										
Retail cost (1982-84=100)	193.1	189.2	194.6	189.5	219.7	229.7	214.7	214.0	205.6	200.1
Farm value (1982-84=100)	130.1	113.3	118.7	117.7	147.8	134.5	105.5	134.3	104.2	103.2
Farm-retail spread (1982-84=100)	225.5	228.3	233.6	226.4	256.6	278.7	270.9	255.0	257.7	249.9
Farm value-retail cost (%)	22.9	20.3	20.7	21.1	22.8	19.9	16.7	21.3	17.2	17.5
Processed fruits and vegetables										
Retail cost (1982-84=100)	137.5	144.4	147.9	147.6	148.8	150.9	150.8	151.8	152.5	152.1
Farm value (1982-84=100)	120.5	121.5	115.9	114.6	116.7	116.4	115.8	115.0	114.6	114.1
Farm-retail spread (1982-84=100)	142.8	151.6	157.9	157.9	158.8	161.7	161.7	163.3	164.3	164.0
Farm value-retail cost (%)	20.8	20.0	18.6	18.5	18.6	18.3	18.3	18.0	17.9	17.8
Fats and oils										
Retail cost (1982-84=100)	137.3	140.5	141.7	142.0	140.7	141.2	143.3	147.6	149.7	152.4
Farm value (1982-84=100)	121.3	112.3	109.4	105.7	126.9	128.1	119.6	114.9	112.9	120.5
Farm-retail spread (1982-84=100)	143.1	150.9	153.6	155.4	145.8	146.0	152.0	159.6	163.2	164.1
Farm value-retail cost (%)	23.8	21.5	20.8	20.0	24.3	24.4	22.5	20.9	20.3	21.3

See footnotes at end of table, next page.

Table 8—Farm-Retail Price Spreads (continued)

	Annual			1997	1998					
	1995	1996	1997	Sep	Apr	May	Jun	Jul	Aug	Sep
Beef, All Fresh Retail Price (cts/lb)	259.4	252.4	253.8	254.3	255.4	254.4	251.7	251.9	255.1	252.6
Beef, Choice										
Retail price (cents/lb.)[2]	284.4	280.2	279.5	283.0	278.2	277.4	278.7	278.5	279.4	274.2
Wholesale value (cents)[3]	163.9	158.1	158.2	159.4	151.6	157.0	154.5	154.0	160.6	153.2
Net farm value (cents)[4]	138.4	134.9	137.2	137.8	136.4	137.1	134.8	128.6	126.1	124.6
Farm-retail spread (cents)	146.0	145.3	142.3	145.2	141.8	140.3	143.9	149.9	153.3	149.6
Wholesale-retail (cents)[5]	120.5	122.1	121.3	123.6	126.6	120.4	124.2	124.5	118.8	121.0
Farm-wholesale (cents)[6]	25.5	23.2	21.0	21.6	15.2	19.9	19.7	25.4	34.5	28.6
Farm value-retail price (%)	49	48	49	49	49	49	48	46	45	45
Pork										
Retail price (cents/lb.)[2]	194.8	220.9	231.5	234.7	225.0	226.7	228.9	231.0	230.9	231.2
Wholesale value (cents)[3]	98.8	117.2	117.1	117.4	91.0	99.8	98.0	94.9	96.4	93.2
Net farm value (cents)[4]	66.7	84.6	81.1	78.3	55.7	66.3	65.8	57.6	55.4	47.9
Farm-retail spread (cents)	128.1	136.3	150.4	156.4	169.3	160.4	163.1	173.4	175.5	183.3
Wholesale-retail (cents)[5]	96.0	103.7	114.4	117.3	134.0	126.9	130.9	136.1	134.5	138.0
Farm-wholesale (cents)[6]	32.1	32.6	36.0	39.1	35.3	33.5	32.2	37.3	41.0	45.3
Farm value-retail price (%)	34	38	35	33	25	29	29	25	24	21

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 Total	Consumption Per capita[2]	Conversion factor[3]	Primary market price[4]
				Million lbs.[5]				*Lbs.*		*$/cwt*
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	25,719	2,536	28,720	2,110	400	26,210	68	0.700	61.47
1999	400	24,031	2,760	27,191	2,135	350	24,706	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	18,772	660	19,840	1,245	475	18,120	52	0.776	33.87
1999	475	19,455	700	20,630	1,260	490	18,880	54	0.776	33-35
Veal[6]										
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	242	96	352	7	11	334	1	0.89	76
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	45,000	3,292	49,187	3,362	892	44,933	122	--	--
1999	892	43,964	3,545	48,401	3,403	857	44,141	119	--	--
										¢/lb
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	27,522	5	28,133	4,683	600	22,850	73	0.869	62.50
1999	600	28,943	4	29,547	4,525	650	24,372	78	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	5,222	1	5,638	421	350	4,866	18	1.0	61.70
1999	350	5,235	1	5,586	430	300	4,855	18	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	33,264	6	34,299	5,539	957	27,801	92	--	--
1999	957	34,724	5	35,686	5,367	955	29,363	96		
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	78,264	3,298	83,486	8,901	1,849	72,735	214	--	--
1999	1,849	78,688	3,550	84,087	8,770	1,812	73,504	215	--	--

-- = 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 Total	Consumption Per capita	Primary market price*
		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	6,647.3	5.9	6,660.6	226.2	921.1	10.0	5,503.3	244.4	75.9
1999	10.0	6,790.0	4.0	6,804.0	243.0	970.0	10.0	5,581.0	245.7	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 & Use[1]

	Commercial				Total commercial supply	Commercial				CCC net removals	
	Production	Farm use	Farm Marketings	Beg. stocks	Imports		CCC net removals	Ending stocks	Disappearance	All milk price[1]	Skim solids basis	Total solid basis[2]
	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	157.3	1.4	156.0	4.9	4.6	165.5	0.4	5.1	160.1	15.20	4.2	2.7
1999	160.0	1.3	158.7	5.1	3.3	167.0	0.8	4.9	161.3	14.00	3.5	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	Aug	Mar	Apr	May	Jun	Jul	Aug
Broilers										
Federally inspected slaughter certified (mil. lb.)	25,020.8	26,336.3	27,270.7	2,272.4	2,331.9	2,384.0	2,258.1	2,348.8	2,350.7	2,257.6
Wholesale price, 12-city (cents/lb.)	56.2	61.2	58.8	63.2	58.1	58.8	60.1	64.3	68.5	72.1
Price of grower feed ($/ton)[1]	135.1	175.5	157.8	153.0	141.0	138.0	137.0	134.0	131.0	114.0
Broiler-feed price ratio[2]	5.1	4.4	4.7	5.2	5.0	5.3	5.4	6.0	6.6	8.2
Stocks beginning of period (mil. lb.)	458.4	560.1	641.3	655.8	629.5	665.8	710.3	654.7	583.5	553.2
Broiler-type chicks hatched (mil.)	7,932.4	8,076.9	8,306.5	708.6	732.0	709.4	740.0	719.0	723.4	713.2
Turkeys										
Federally inspected slaughter certified (mil. lb.)	5,128.8	5,465.6	5,477.9	456.3	445.5	442.3	421.2	457.9	459.3	414.3
Wholesale price, Eastern U.S. 8-16 lb. young hens (cents/lb.)	66.4	66.5	64.9	68.1	55.5	58.1	58.7	60.6	61.4	63.2
Price of turkey grower feed ($/ton)[1]	130.1	166.1	142.5	139.0	128.0	125.0	122.0	118.0	115.0	102.0
Turkey-feed price ratio[2]	6.3	5.3	5.6	5.9	5.4	5.7	5.8	6.1	6.5	7.6
Stocks beginning of period (mil. lb.)	254.4	271.3	328.0	714.3	512.7	527.0	580.2	612.9	656.5	703.0
Poults placed in U.S. (mil.)	321.7	327.2	321.5	26.3	26.4	25.7	25.7	27.0	26.2	24.5
Eggs										
Farm production (mil.)	74,587	76,456	77,515	6,483	6,829	6,571	6,630	6,423	6,695	6,674
Average number of layers (mil.)	294	298	303	300	313	311	308	308	308	308
Rate of lay (eggs per layer on farms)	253.8	256.2	255.2	21.6	21.8	21.1	21.5	20.9	21.7	21.6
Cartoned price, New York, grade A large (cents/doz.)[3]	72.9	88.2	81.2	74.7	81.4	71.6	60.4	67.3	73.3	77.7
Price of laying feed ($/ton)[1]	149.7	184.4	159.8	162.0	149.0	149.0	161.0	150.0	148.0	120.0
Egg-feed price ratio[2]	8.6	8.5	8.8	7.8	9.4	8.5	6.8	8.0	7.9	10.8
Stocks, first of month Frozen (mil. doz.)	14.8	10.5	7.7	6.7	9.3	7.9	7.0	9.8	7.7	8.9
Replacement chicks hatched (mil.)	397.0	407.0	422.0	33.1	40.0	39.9	39.6	39.2	36.6	33.5

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

Table 14—Dairy

	Annual			1997	1998					
	1995	1996	1997	Aug	Mar	Apr	May	Jun	Jul	Aug
Milk--Basic Formula Price ($/cwt)[1]	11.83	13.39	12.05	12.07	12.81	12.01	10.88	13.10	14.77	14.99
Wholesale prices										
Butter, Central States (cents/lb.)[2]	81.9	108.2	116.2	110.5	134.1	136.4	153.2	186.7	203.1	216.6
Am. cheese, Wis. assembly pt. (cents/lb.)	132.8	149.1	132.4	137.6	138.8	129.7	123.0	151.3	162.6	166.9
Nonfat dry milk (cents/lb.)[3]	108.6	122.2	110.0	107.2	104.7	104.3	103.5	102.9	103.0	104.6
USDA net removals										
Total (mil. lb.)[4]	2,105.7	86.9	1,090.0	101.0	40.3	25.9	24.0	12.3	19.0	13.8
Butter (mil. lb.)	78.5	0.1	38.4	3.6	0.7	0.4	0.3	0.0	0.0	0.0
Am. cheese (mil. lb.)	6.1	4.6	11.3	0.6	0.6	0.7	0.6	0.6	0.7	0.8
Nonfat dry milk (Mil. lb.)	343.8	57.2	296.7	35.1	24.7	27.8	39.1	27.7	54.8	28.2
Milk										
Milk prod. 20 states (mil. lb.)	131,780	131,343	133,861	11,213	11,722	11,591	12,067	11,446	11,345	11,160
Milk per cow (lb.)	16,762	16,800	17,252	1,446	1,517	1,499	1,557	1,476	1,464	1,439
Number of milk cows (1,000)	7,862	7,818	7,759	7,757	7,725	7,735	7,750	7,753	7,750	7,753
U.S. milk production (mil. lb.)[5]	155,424	154,259	156,602	13,058	13,726	13,520	14,070	13,341	13,223	13,002
Stocks, beginning[4]										
Total (mil. lb.)	5,760	4,168	4,714	7,385	5,656	6,009	6,488	6,689	6,664	6,591
Commercial (mil. lb.)	4,263	4,099	4,704	7,354	5,640	5,990	6,460	6,663	6,637	6,554
Government (mil. lb.)	1,497	69	10	31	16	20	28	26	27	38
Imports, total (mil. lb.)[4]	2,936	2,911	2,698	228	310	279	297	369	533	--
Commercial disappearance (mil. lb.)[4]	154,843	154,985	156,597	13,604	13,532	13,192	14,026	13,613	13,705	--
Butter										
Production (mil. lb.)	1,264.5	1,174.5	1,151.2	68.8	100.8	103.0	92.9	72.6	67.1	66.8
Stocks, beginning (mil. lb.)	79.4	18.6	13.7	85.6	44.2	55.9	67.4	72.7	60.5	51.0
Commercial disappearance (mil. lb.)	1,186.3	1,179.8	1,108.7	81.3	89.7	92.4	88.0	89.2	86.8	--
American cheese										
Production (mil. lb.)	3,131.4	3,280.8	3,285.2	260.0	285.2	289.7	293.1	287.8	277.3	262.3
Stocks, beginning (mil. lb.)	310.4	307.0	379.9	470.6	411.2	421.5	442.2	443.2	450.1	460.9
Commercial disappearance (mil. lb.)	3,148.5	3,230.1	3,268.6	272.1	275.8	272.3	295.1	282.9	269.0	--
Other cheese										
Production (mil. lb.)	3,785.5	3,936.7	4,043.8	336.5	360.0	351.6	360.0	353.3	335.3	334.8
Stocks, beginning (mil. lb.)	126.8	105.3	107.3	135.9	98.8	98.2	103.1	108.8	133.6	134.4
Commercial disappearance (mil. lb.)	4,125.6	4,243.0	4,365.5	373.5	383.9	368.1	377.9	352.2	363.0	--
Nonfat dry milk										
Production (mil. lb.)	1,233.0	1,061.8	1,271.6	90.2	107.3	120.4	121.3	104.2	90.2	79.0
Stocks, beginning (mil. lb.)	131.2	85.0	71.4	202.3	131.2	128.9	161.2	186.8	198.2	203.3
Commercial disappearance (mil. lb.)	923.7	1,009.0	895.4	59.8	96.7	73.4	64.2	82.3	53.6	--
Frozen dessert										
Production (mil. gal.)[6]	1,229.6	1,240.9	1,281.4	119.2	109.4	115.4	118.9	132.2	135.0	122.0

	Annual			1997				1998		
	1995	1996	1997	I	II	III	IV	I	II	III
Milk production (mil. lb.)	155,424	154,259	156,602	38,961	40,683	38,805	38,153	39,209	40,931	38,700
Milk per cow (lb.)	16,433	16,479	16,915	4,192	4,384	4,195	4,144	4,268	4,447	4,205
No. of milk cows (1,000)	9,458	9,361	9,258	9,295	9,280	9,251	9,206	9,186	9,205	9,203
Milk-feed price ratio	1.63	1.60	1.54	1.54	1.45	1.47	1.71	1.73	1.71	2.03
Returns over concentrate costs ($/cwt milk)	9.50	10.98	9.80	9.85	9.05	9.05	11.00	11.10	10.40	12.10

-- = 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 64's (20.60-22.04 microns) staple 2-3/4" and up. 2. Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10 cents.

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

Table 16—Meat Animals

	Annual			1997	1998					
	1995	1996	1997	Sep	Apr	May	Jun	Jul	Aug	Sep
Cattle on feed (7 states, 1000+ head capacity)										
Number on feed (1,000 head)[1]	8,031	8,667	8,943	7,850	8,607	8,295	8,289	7,825	8,985	7,750
Placed on feed (1,000 head)	20,034	19,564	20,765	2,278	1,358	1,740	1,314	1,677	2,031	2,254
Marketings (1,000 head)	18,753	18,636	19,552	1,528	1,609	1,681	1,727	1,755	1,942	1,577
Other disappearance (1,000 head)	674	652	701	42	61	65	51	41	52	51
Market prices ($/cwt)										
Slaughter cattle										
Choice steers, 1,100-1,300 lb.										
Texas	66.69	65.06	65.99	66.04	64.52	64.52	63.85	60.28	58.75	57.93
Neb. direct	66.26	65.05	66.32	66.22	64.68	64.40	63.26	59.97	58.65	58.28
Boning utility cows, Sioux Falls	35.58	30.33	34.27	32.41	38.44	39.30	39.61	36.11	36.06	33.47
Feeder steers										
Medium no. 1, Oklahoma City										
600-650 lb.	70.49	61.31	81.34	85.02	86.20	85.86	77.40	72.96	72.24	70.37
750-800 lb.	68.03	61.08	76.19	78.57	74.96	73.95	73.10	69.13	68.75	68.75
Slaughter hogs										
Barrows and gilts, 230-250 lb.										
Iowa, S. Minn.	42.35	53.39	51.36	49.99	34.44	42.00	41.57	35.91	34.86	29.12
5 markets	41.99	53.42	51.30	49.42	35.12	41.74	41.40	41.40	34.62	30.18
Sows, 5 markets	32.62	44.61	44.51	41.48	28.19	30.37	30.54	26.77	23.39	19.83
Slaughter sheep and lambs										
Lambs, Choice, San Angelo	75.86	85.27	87.95	85.45	71.50	73.00	91.21	82.21	82.05	69.50
Ewes, Good, San Angelo	33.91	39.05	49.33	44.20	43.38	35.13	37.88	36.21	35.55	36.00
Feeder lambs										
Choice, San Angelo	81.08	94.88	104.43	98.10	76.00	76.56	88.00	76.43	78.80	74.75
Wholesale meat prices, Midwest										
Boxed beef cut-out value										
Choice, 700-800 lb.	106.09	102.01	102.75	102.58	97.61	101.49	99.58	98.46	102.16	96.66
Select, 700-800 lb.	98.45	95.34	96.15	94.62	96.23	92.24	94.71	90.41	90.65	87.41
Canner and cutter cow beef	68.67	58.18	64.50	63.89	65.60	66.58	63.50	62.83	62.13	56.50
Pork cutout	--	--	--	--	54.32	63.94	62.45	57.62	57.25	50.72
Pork loins, bone-in, 1/4 " trim,14-19 lb.	126.99	138.73	128.75	112.07	102.51	130.64	113.13	106.51	105.90	97.23
Pork bellies, 12-14 lb.	43.04	69.96	73.91	72.52	54.65	57.87	63.10	68.46	72.99	57.49
Hams, bone-in, trimmed, 20-27 lb.	--	--	--	--	42.82	46.62	50.80	--	--	--
All fresh beef retail price	259.42	252.44	253.72	254.34	255.38	254.45	251.66	251.93	255.07	252.65
Commercial slaughter (1,000 head)[2]										
Cattle	35,639	36,583	36,351	2,968	2,928	2,958	3,109	3,039	3,040	--
Steers	18,274	17,819	17,554	1,433	1,422	1,486	1,599	1,569	1,554	--
Heifers	10,399	10,756	11,538	952	970	962	967	929	950	--
Cows	6,281	7,274	6,563	522	484	457	488	489	483	--
Bull and stags	686	728	696	61	51	53	55	52	53	--
Calves	1,430	1,768	1,574	136	109	102	116	133	125	--
Sheep and lambs	4,560	4,184	3,911	334	384	281	294	281	275	--
Hogs	96,326	92,394	91,566	8,018	8,329	7,572	7,730	8,269	8,168	--
Barrows and gilts	91,683	88,224	88,253	7,702	7,998	7,269	7,391	7,902	7,822	--
Commercial production (mil. lb.)										
Beef	25,117	25,421	25,384	2,126	2,090	2,124	2,249	2,213	2,213	--
Veal	307	368	323	28	20	19	20	21	21	--
Lamb and mutton	284	265	257	21	25	19	19	18	18	--
Pork	17,810	17,084	17,245	3,664	1,566	3,582	1,444	1,529	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												
	Set aside[3]	Planted	Harvested	Yield	Production	Total supply[4]	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price[5]
	Mil. Acres			Bu./acre	Mil. bu.							$/bu.
Wheat												
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	1,008	1,040	2,342	722	3.38
1998/99*	--	66.2	59.1	43.3	2,557	3,370	375	1,018	1,075	2,468	902	2.45-2.75
	Mil. acres			lb./acre	Mil. cwt (rough equiv)							$/cwt
Rice[6]												
1994/95	0.3	3.4	3.3	5,964	197.8	230.9	--	100.7	98.9	199.6	31.3	6.78
1995/96	0.5	3.1	3.1	5,621	173.9	212.6	--	104.6	83.0	187.6	25.0	9.15
1996/97	--	2.8	2.8	6,121	171.3	206.3	--	100.7	78.4	179.1	27.2	9.96
1997/98*	--	3.1	3.0	5,896	178.9	215.3	--	102.4	85.2	187.6	27.7	9.64
1998/99*	--	3.2	3.2	5,696	181.5	219.2	--	108.9	84.0	192.9	26.3	8.75-9.75
	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	5,654	1,782	1,515	8,951	1,308	2.45
1998/99*	--	80.8	73.8	132.0	9,743	11,061	5,850	1,850	1,650	9,350	1,711	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	387	55	210	652	49	2.20
1998/99*	--	9.7	7.8	66.5	521	570	275	45	195	515	55	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*	--	6.5	6.0	59.9	358	513	185	172	35	392	121	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*	--	4.9	2.8	60.5	170	334	165	95	2	262	72	1.10-1.30
	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*	--	70.6	69.6	38.8	2,703	2,839	164	1,597	877	2,639	200	6.45
1998/99*	--	72.7	71.6	38.7	2,769	2,975	150	1,600	830	2,580	395	5.00-5.70
								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*	--	--	--	--	18,108	19,685	--	15,200	3,175	18,375	1,310	25.84
1998/99*	--	--	--	--	18,080	19,445	--	15,350	2,650	18,000	1,445	25.50-28.50
								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*	--	--	--	--	38,070	38,335	--	28,660	9,400	38,060	275	187.5
1998/99*	--	--	--	--	37,925	38,250	--	29,600	8,400	38,000	250	130-150

See footnotes at end of table, next page

Table 17—Supply & Utilization (continued)

	Area						Feed	Other				
	Set aside[3]	Planted	Harvested	Yield	Production	Total Supply[4]	& residual	domestic use	Exports	Total Use	Ending stocks	Farm price[5]
	Mil. Acres			*Lb./acre*		*Mil. Bales*						*¢/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	10.3	616	13.3	17.5	--	10.6	4.5	15.1	2.3	--

-- = Not available or not applicable. *October 9, 1998 Supply and Demand Estimates. 1. Marketing year beginning June1 for wheat, barley, and oats; August 1 for cotton and rice; September 1 for soybeans, corn, and sorghum; October 1 for soymeal and soyoil. 2. Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, and 4.59 480-pound bales of cotton. 3. Includes diversion, acreage reduction, 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 soymeal 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	Participation rate[4]
					Mil. acres	*Percent of base*				
	$/bu.						*$/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	--	--	--	0.663	78.9	34.50	--
	$/cwt						*$/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	--	--	--	--	2.921	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	--	--	--	0.377	82.0	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	--	--	--	0.452	13.6	56.90	--
	$/bu.						*$/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	--	--	--	0.284	11.2	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	--	--	--	0.031	6.5	50.70	--
	$/bu.						*$/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	--	--	--	--	8.173	16.4	604.00	--

-- = Not available. 1. There are no Findley loan rates for rice or cotton. See footnotes 5 and 7. 2. Prior to 1996, national effective crop acreage base as determined by FSA. Net of CRP. 3. Program requirements for participating producers (mandatory acreage reduction program/mandatory paid land diversion/optional paid land diversion). Acres idled must be devoted to a conserving use to receive program benefits. 4. Percentage of effective base enrolled in acreage reduction programs. Starting in 1996, participation rate is the percent of eligible acres that entered production flexibility contracts. 5. Estimated payment rates and acres under contract. 6. A marketing loan 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							
	Sep	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Grower prices										
Apples (¢/pound)[4]	25.9	22.3	21.6	21.3	19.2	18.2	16.3	16.1	19.0	22.7
Pears (¢/pound)[4]	18.40	12.65	13.00	12.15	14.60	18.65	17.65	20.25	22.85	21.00
Oranges ($/box)[5]	7.15	3.15	3.73	5.14	5.79	5.86	6.70	6.71	5.37	4.97
Grapefruit ($/box)[5]	4.22	1.79	1.61	1.03	1.36	0.42	3.58	3.66	6.01	11.09
Stocks, ending										
Fresh apples (mil. lb.)	2,968	3,729	2,841	2,277	1,626	1,113	637	322	312	--
Fresh pears (mil. lb.)	616	273	212	125	61	32	4	0	94	--
Frozen fruits (mil. lb.)	1,051	1,128	1,009	882	808	764	836	1,040	1,027	--
Frozen conc.orange juice (mil. single-strength gallons)	526	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

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Production 1/										
Total vegetables (1,000 cwt)	543,435	562,938	565,754	677,975	675,793	762,934	742,595	759,347	752,266	--
Fresh (1,000 cwt) 2/ 4/	254,418	254,039	242,733	393,249	377,698	396,671	391,699	408,823	428,171	--
Processed (tons) 3/ 4/	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/	714,992	749,151	746,832	776,357	750,799	782,340	777,870	776,677	808,602	--
Potatoes (1,000 cwt)	370,444	402,110	417,622	425,367	428,693	467,054	443,606	498,633	465,537	--
Sweetpotatoes (1,000 cwt)	11,358	12,594	11,203	12,005	11,053	13,395	12,906	13,456	13,512	--
Dry edible beans (1,000 cwt)	23,729	32,379	33,765	22,615	21,913	29,028	30,812	27,960	29,156	29,886

	1997		1998							
	Aug	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Shipments (1,000 cwt)										
Fresh	17,819	18,377	23,713	18,723	20,292	28,362	28,082	29,181	32,093	18,422
Iceberg lettuce	3,497	2,908	4,089	3,233	3,094	4,125	3,628	3,377	4,020	3,099
Tomatoes, all	3,077	3,776	4,189	3,057	3,647	4,767	3,540	3,031	3,962	2,667
Dry-bulb onions	3,423	3,627	4,075	3,436	2,753	4,009	3,584	3,006	3,254	3,278
Others 6/	7,822	8,066	11,360	8,997	10,798	15,461	17,330	19,767	20,857	9,378
Potatoes, all	9,682	14,067	16,328	11,870	15,619	23,416	14,554	11,965	12,732	9,569
Sweetpotatoes	185	172	146	180	252	373	213	147	140	96

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	824
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	1,488	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	143.58	117.73
Imports, green bean equiv. (mil. lbs.)[2]	2,182	2,494	--	--	--	--	--	--	--	--

	Annual		1997	1998					
	1995	1996	1997	Aug	Mar	Apr	May	Jun	Jul	Aug
Tobacco										
Avg. price to grower[3]										
Flue-cured ($/lb.)	1.79	1.83	1.73	1.60	--	--	--	--	1.63	1.62
Burley ($/lb.)	1.85	1.92	1.86	--	1.76	1.70	--	--	--	--
Domestic taxable removals										
Cigarettes (bil.)	490.3	486.0	471.4	43.6	40.2	35.4	39.9	--	--	--
Large cigars (mil.)[4]	2,561.7	3,166.4	3,552.9	339.3	325.6	329.6	322.9	--	--	--

-- = 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	225.6
Production (metric tons)	533.2	588.0	542.9	562.2	559.4	525.2	538.1	583.3	611.7	590.6
Exports (metric tons[1]	103.7	101.1	111.1	112.7	101.1	100.0	98.0	100.1	100.1	97.9
Consumption (metric tons)[2]	532.7	561.9	555.5	550.2	562.3	548.1	550.8	577.9	588.0	601.8
Ending stocks (metric tons)[3]	118.9	145.1	132.5	144.5	141.5	118.6	105.9	111.3	135.0	123.8
Coarse grains										
Area (hectares)	321.9	316.3	321.9	323.8	317.5	323.2	313.6	322.8	314.6	310.7
Production (metric tons)	793.7	828.7	810.5	871.9	799.5	873.2	802.0	908.2	888.6	882.9
Exports (metric tons[1]	104.7	89.1	95.6	91.9	85.3	98.0	87.9	93.3	86.9	86.5
Consumption (metric tons)[2]	817.7	817.1	809.7	843.8	839.2	860.8	840.3	879.1	880.7	880.4
Ending stocks (metric tons)[3]	123.2	134.8	135.6	163.6	123.8	136.2	97.9	126.9	134.8	137.3
Rice, milled										
Area (hectares)	146.5	146.6	147.4	146.7	145.5	147.9	148.1	149.8	148.2	149.0
Production (metric tons)	343.9	352.0	354.7	355.8	355.6	364.8	371.2	380.2	385.4	376.3
Exports (metric tons[1]	11.7	12.1	14.1	14.9	16.4	21.0	19.5	18.9	24.9	20.4
Consumption (metric tons)[2]	338.2	347.4	356.4	357.9	358.7	366.9	371.2	379.1	384.4	385.1
Ending stocks (metric tons)[3]	54.5	59.1	57.5	55.3	52.2	50.1	50.1	51.2	52.2	43.4
Total grains										
Area (hectares)	694.2	694.3	691.8	693.6	685.4	686.6	681.5	703.9	692.7	685.3
Production (metric tons)	1,670.8	1,768.7	1,708.1	1,789.9	1,714.5	1,763.2	1,711.3	1,871.7	1,885.7	1849.8
Exports (metric tons[1]	220.1	202.3	220.8	219.5	202.8	219.0	205.4	212.3	211.9	204.8
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	1,836.1	1,853.1	1867.3
Ending stocks (metric tons)[3]	296.6	339.0	325.6	363.4	317.5	304.9	253.9	289.4	322.0	304.5
Oilseeds										
Crush (metric tons)	171.7	176.7	185.1	184.4	190.1	208.1	217.5	219.1	229.6	235.5
Production (metric tons)	212.4	215.7	224.3	227.5	229.4	261.8	258.5	261.2	287.1	290.8
Exports (metric tons)	35.6	33.4	37.6	38.2	38.7	44.1	44.3	49.4	53.3	52.6
Ending stocks (metric tons)	23.7	23.4	21.9	23.6	20.3	27.2	22.1	16.4	22.2	26.2
Meals										
Production (metric tons)	116.8	119.3	125.2	125.2	131.7	142.1	147.4	149.3	156.1	160.6
Exports (metric tons)	39.8	40.7	42.2	40.8	44.9	46.7	49.7	50.3	51.4	54.2
Oils										
Production (metric tons)	57.1	58.1	60.6	61.1	63.7	69.6	73.2	75.5	76.8	79.8
Exports (metric tons)	20.4	20.5	21.3	21.3	24.3	27.1	26.0	28.8	29.3	29.9
Cotton										
Area (hectares)	31.6	33.2	34.8	32.6	30.7	32.2	35.9	33.8	33.5	32.7
Production (bales)	79.7	87.1	95.7	82.5	76.7	85.6	93.0	89.4	91.1	84.8
Exports (bales)	31.3	29.8	28.2	25.6	26.7	28.4	27.8	26.9	26.3	25.2
Consumption (bales)	86.9	85.6	86.0	85.8	85.5	85.6	87.1	88.2	88.4	86.6
Ending stocks (bales)	24.8	26.9	37.0	34.4	26.3	28.3	33.8	37.0	40.5	38.5
	1989	1990	1991	1992	1993	1994	1995	1996 F	1997 F	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 and poultry, Shayle Shagam (202) 694-5186; 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	Sep	Apr	May	Jun	Jul	Aug	Sep
Export commodities										
Wheat, f.o.b. vessel, Gulf ports ($/bu.)	4.82	5.63	4.35	4.08	3.55	3.50	3.28	3.21	2.96	2.94
Corn, f.o.b. vessel, Gulf ports ($/bu.)	3.13	4.17	2.98	2.89	2.72	2.70	2.65	2.56	2.25	2.19
Grain sorghum, f.o.b. vessel, Gulf ports ($/bu.)	3.13	3.90	2.89	2.72	2.68	2.63	2.56	2.51	2.34	2.16
Soybeans, f.o.b. vessel, Gulf ports ($/bu.)	6.50	7.88	7.94	7.41	6.68	6.66	6.59	6.57	5.83	5.62
Soybean oil, Decatur (¢/lb.)	26.75	23.75	23.33	22.88	28.10	28.28	25.83	24.88	24.00	25.14
Soybean meal, Decatur, ($/ton)	173.70	246.67	266.70	278.29	162.51	160.03	168.55	183.45	146.15	135.83
Cotton, 7-market avg. spot (¢/lb.)	93.45	77.93	69.62	70.75	61.88	65.21	73.50	74.18	71.87	71.77
Tobacco, avg. price at auction (¢/lb.)	178.79	183.20	182.74	175.49	169.05	---	---	162.96	159.51	176.99
Rice, f.o.b., mill, Houston ($/cwt)	16.68	19.64	20.88	20.55	19.00	19.00	19.00	19.00	18.85	18.75
Inedible tallow, Chicago (¢/lb.)	19.22	20.13	20.75	20.88	17.38	20.35	19.63	17.31	17.57	16.69
Import commodities										
Coffee, N.Y. spot ($/lb.)	1.45	1.29	2.05	2.12	1.57	1.43	1.30	1.20	1.28	1.13
Rubber, N.Y. spot (¢/lb.)	82.52	72.88	55.40	51.89	41.27	42.65	41.26	40.03	38.58	68.66
Cocoa beans, N.Y. ($/lb.)	0.61	0.62	0.69	0.77	0.75	0.78	0.74	0.73	0.72	0.72

Information contact: Mary Teymourian (202) 694-5173 or maryt@econ.ag.gov

Table 25—Trade Balance

	Calendar Year			1997	1998					
	1997	1998 F[1]	1999 P[1]	Aug	Mar	Apr	May	Jun	Jul	Aug
					$ million					
Exports										
Agricultural	57,245	54,500	52,000	4,427	4,733	4,249	3,928	3,971	3,884	3,704
Nonagricultural	585,977	--	--	48,161	53,299	48,859	48,774	49,191	44,054	45,692
Total[2]	643,222	--	--	52,588	58,032	53,108	52,702	53,162	47,938	49,396
Imports										
Agricultural	36,289	38,000	39,500	2,849	3,453	3,328	2,981	3,099	2,908	2,857
Nonagricultural	828,412	--	--	69,739	74,105	72,059	70,193	73,577	72,818	72,688
Total[3]	864,701	--	--	72,588	77,558	75,387	73,174	76,676	75,726	75,545
Trade Balance										
Agricultural	20,956	16,500	12,500	1,578	1,280	921	947	872	976	847
Nonagricultural	-242,435	--	--	-21,578	-20,806	-23,200	-21,419	-24,386	-28,764	-26,996
Total	-221,479	--	--	-20,000	-19,526	-22,279	-20,472	-23,514	-27,788	-26,149

F = Forecast. P = Projection. -- = Not available. 1. 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 Rates[1]

	Annual			1997	1998					
	1995	1996	1997	Aug	Mar P	Apr P	May P	Jun P	Jul P	Aug P
					1990=100					
Total U.S. trade	96.2	100.8	111.9	116.0	116.7	116.6	115.6	117.3	118.1	118.8
Agricultural trade										
U.S. markets	97.3	101.0	109.6	109.3	117.1	117.3	118.2	120.7	120.6	123
U.S. competitors	97.4	98.7	109.1	113.3	116.5	115.9	115.2	117.2	117.2	117.2
High-valued products										
U.S. markets	95.2	100.4	108.2	107.5	113.0	113.7	114.8	117.6	118.2	120.9
U.S. competitors	98.3	100.1	110.9	116.2	116.8	116.6	115.0	116.5	116.7	116.8
Corn										
U.S. markets	89.1	96.4	107.1	105.6	116.3	117.3	118.9	122.5	122.6	125.1
U.S. competitors	88.8	90.1	97.4	100.7	100.8	101.4	100.7	101.4	102.1	102
Soybeans										
U.S. markets	91.1	96.0	107.9	109.3	117.8	117.4	117.7	120.7	120.3	121.3
U.S. competitors	81.3	80.8	82.2	82.5	84.3	85.4	85.3	85.4	85.4	85.7
Wheat										
U.S. markets	100.4	100.7	105.4	104.7	112.4	112.6	113.2	114.4	114.3	115.6
U.S. competitors	100.8	102.1	109.8	113.0	114.9	115.3	115.4	117.1	117.5	119.3
Vegetables										
U.S. markets	102.2	105.6	112.4	112.0	117.6	118.4	119.6	122.1	122.9	126.1
U.S. competitors	99.1	100.5	112.0	117.0	117.8	117.3	115.5	117.0	117.1	117.1
Red meats										
U.S. markets	84.8	93.3	100.4	98.2	107.6	108.6	110.3	114.1	114.3	117.4
U.S. competitors	96.3	98.0	107.9	112.5	114.0	114.2	113.3	114.9	114.9	115.5
Fruits & fruit juices										
U.S. markets	96.2	101.3	111.3	111.2	116.4	117.4	118.5	121.2	122.1	124.9
U.S. competitors	98.2	98.2	107.2	111.5	113.2	113.1	111.7	113.3	113.9	114.2
Cotton										
U.S. markets	93.6	95.5	105.7	104.4	128.8	125.1	128.1	133.3	131.0	129.7
U.S. competitors	104.6	101.6	103.0	104.0	105.6	107.1	106.9	108.2	108.2	109.3
Poultry										
U.S. markets	107.3	102.8	111.9	110.7	113.3	113.3	114.0	115.9	116.1	119.6
U.S. competitors	93.9	95.7	107.3	112.2	113.4	112.5	111.0	112.7	112.7	112.7

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 FASís 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			Aug		Calendar Year			Aug	
	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	--	--	197	69	566	--	--	59	42
Meats and preps., excl. poultry (mt)[2]	1,924	1,600	1,600	167	163	4,597	4,100	4,300	415	348
Dairy products (mt)[1]	126	--		17	9	932	900	900	94	63
Poultry meats (mt)	2,585	2,700	2,800	235	221	2,423	--	--	210	191
Fats, oils, and greases (mt)	1,089	1,300	1,100	100	142	562	--	--	49	63
Hides and skins, incl. furskins	--	--	--	--	--	1,651	1,400	1,400	140	96
Cattle hides, whole (no.)[1]	20,113	--	--	1,822	1,556	1,187	--	--	103	74
Mink pelts (no.)[1]	3,763	--	--	216	85	97	--	--	7	3
Grains and feeds (mt)[3]	91,120	--	--	8,903	7,853	15,368	14,000	14,000	1,402	1,119
Wheat (mt)[4]	25,264	25,500	31,500	3,324	2,630	4,095	3,800	4,200	504	335
Wheat flour (mt)	508	500	500	32	40	138	--	--	10	10
Rice (mt)	2,508	3,100	2,700	147	216	932	1,100	1,000	53	72
Feed grains, incl. products (mt)[5]	49,091	43,800	45,900	4,280	3,838	6,219	5,000	4,700	505	398
Feeds and fodders (mt)	12,352	11,700	11,900	1,014	970	2,669	2,400	2,300	224	184
Other grain products (mt)	1,397	--	--	106	160	1,316	--	--	106	120
Fruits, nuts, and preps. (mt)	3,896	--	--	303	277	4,235	4,600	4,600	345	330
Fruit juices, incl. froz. (1,000 hectoliters)[1]	10,689	--	--	1,038	826	662	--	--	59	54
Vegetables and preps. (mt)	3,343	--	--	233	227	4,144	2,800	2,900	313	300
Tobacco, unmanufactured (mt)	222	--	--	9	13	1,553	1,400	1,400	69	97
Cotton, excl. linters (mt)[6]	1,568	1,600	1,100	100	88	2,682	2,600	1,700	166	136
Seeds (mt)	1,098	--	--	44	18	884	900	900	55	38
Sugar, cane or beat (mt)[1]	125	--	--	11	7	54	--	--	4	3
Oilseeds and products (mt)	36,665	36,200	35,600	1,620	1,337	12,057	11,300	9,500	646	450
Oilseeds (mt)	26,764	--	--	1,078	774	8,326	--	--	407	215
Soybeans (mt)	26,023	23,500	23,300	1,021	723	7,379	6,200	5,100	307	171
Protein meal (mt)	7,311	--	--	313	325	1,966	--	--	84	63
Vegetable oils (mt)	2,590	--	--	230	239	1,766	--	--	155	172
Essential oils (mt)	45	--	--	4	3	588	--	--	42	44
Other	361	--	--	28	24	4,287	--	--	358	330
Total	144,166	142,000	148,700	11,774	10,383	57,245	54,500	52,000	4,427	3,704
IMPORTS										
Animals, live (no.)[1]	5,298	--	--	357	484	1,594	1,700	1,500	113	134
Meats and preps., excl. poultry (mt)	1,154	1,200	1,200	96	109	2,630	2,700	2,800	218	234
Beef and veal (mt)	797	--	--	68	75	1,609	--	--	136	153
Pork (mt)	261	--	--	21	25	754	--	--	62	61
Dairy products (mt)[1]	255	--	--	26	41	1,225	1,400	1,400	103	130
Poultry and products[1]	--	--	--	--	--	195	--	--	13	18
Fats, oils, and greases (mt)	80	--	--	7	7	60	--	--	5	5
Hides and skins, incl. furskins (mt)	--	--	--	--	--	206	--	--	12	9
Wool, unmanufactured (mt)	44	--	--	2	2	154	--	--	8	7
Grains and feeds (mt)	7,535	7,900	7,900	614	685	2,963	2,900	3,000	242	239
Fruits, nuts, and preps., excl. juices (mt)[7]	7,252	7,700	8,300	513	560	3,837	4,800	5,100	268	296
Bananas and plantains (mt)	3,998	4,000	4,000	335	382	1,220	1,200	1,300	101	115
Fruit juices (1,000 hectoliters)[1]	27,806	28,100	28,000	2,363	2,026	829	--	--	68	52
Vegetables and preps. (mt)	4,217	5,100	5,500	227	253	3,707	4,400	4,600	232	266
Tobacco, unmanufactured (mt)	294	200	300	29	23	1,089	1,100	1,100	105	76
Cotton, unmanufactured (mt)	17	--	--	1	0	20	--	--	1	0
Seeds (mt)	224	--	--	11	12	371	--	--	20	24
Nursery stock and cut flowers[1]	--	--	--	--	--	1,004	1,200	1,200	89	86
Sugar, cane or beet (mt)	2,975	--	--	283	168	984	--	--	104	71
Oilseeds and products (mt)	3,963	4,200	4,300	306	265	2,242	2,200	2,400	172	155
Oilseeds (mt)	1,035	--	--	56	35	384	--	--	20	14
Protein meal (mt)	1,048	--	--	94	92	188	--	--	17	13
Vegetable oils (mt)	1,880	--	--	155	139	1,670	--	--	134	129
Beverages, excl. fruit juices (1,000 hectoliters)[1]	21,203	--	--	2,208	2,347	3,385	--	--	295	324
Coffee, tea, cocoa, spices (mt)	2,265	--	--	159	186	6,048	--	--	470	418
Coffee, incl. products (mt)	1,180	1,200	1,200	87	93	3,886	3,900	4,000	312	232
Cocoa beans and products (mt)	767	1,000	1,000	47	62	1,471	1,800	1,900	102	123
Rubber and allied gums (mt)	1,068	1,100	1,200	91	103	1,229	1,100	1,300	103	83
Other	--	--	--	--	--	2,528	--	--	208	228
Total	--	--	--	--	--	36,300	38,000	39,500	2,849	2,857

F = Forecast. P = Projection. -- = Not available. Forecasts are fiscal years (October 1 through Septermber 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: Adjusted transshipments through Canada for 1997 exports. *Information Contact: Mary Fant (202) 694-5272*

Table 28—U.S. Agricultural Exports by Region

Region & country	Calendar year 1996	Calendar year 1997	Calendar year 1998F	1997 Aug	1998 Mar	1998 Apr	1998 May	1998 Jun	1998 Jul	1998 Aug
					$ million					
WESTERN EUROPE	9,702	9,728	9,000	618	712	601	547	517	459	456
European Union[1]	9,322	9,105	8,600	550	683	577	525	501	435	439
Belgium-Luxembourg	749	678	--	36	40	41	51	43	38	34
France	524	570	--	35	40	25	30	25	25	25
Germany	1,489	1,355	--	67	94	96	92	87	72	80
Italy	796	764	--	48	83	44	43	40	21	26
Netherlands	2,218	2,040	--	128	145	97	83	84	79	60
United Kingdom	1,233	1,312	--	111	110	103	103	89	102	95
Portugal	291	254	--	10	12	9	9	35	5	8
Spain, incl. Canary Islands	1,124	1,157	--	45	97	83	47	48	38	55
Other Western Europe	380	624	400	67	29	25	23	16	24	17
Switzerland	211	517	--	61	24	17	14	9	17	9
EASTERN EUROPE	439	284	300	19	24	21	22	31	26	16
Poland	232	121	--	10	16	8	9	18	12	5
Former Yugoslavia	88	96	--	5	2	7	4	6	6	6
Romania	57	18	--	2	2	2	4	4	2	3
NEWLY INDEPENDENT STATES	1,747	1,483	1,400	138	122	114	144	124	141	109
Russia	1,328	1,204	1,100	99	102	95	112	93	97	70
ASIA[2]	28,560	25,705	19,700	1,929	2,069	1,829	1,588	1,567	1,493	1,523
West Asia (Mideast)	2,513	2,612	2,400	217	230	185	161	171	174	164
Turkey	637	734	600	65	65	61	63	60	48	72
Iraq	3	82	--	8	9	8	0	6	30	0
Israel, incl. Gaza and W. Bank	617	537	--	37	37	25	34	19	29	24
Saudi Arabia	551	668	600	60	53	43	33	35	33	32
South Asia	653	760	700	81	32	29	35	33	31	79
Bangladesh	88	120	--	16	12	9	6	6	9	6
India	113	155	--	13	12	11	11	20	7	31
Pakistan	352	442	--	45	6	2	5	6	8	30
China	2,092	1,613	1,500	59	182	102	45	63	57	68
Japan	11,704	10,536	9,500	822	871	898	753	711	681	626
Southeast Asia	3,270	2,988	2,200	197	187	164	147	163	183	181
Indonesia	852	772	500	39	26	28	14	45	50	50
Philippines	892	873	700	71	56	75	66	68	63	73
Other East Asia	8,327	7,196	5,800	552	567	451	446	427	366	405
Korea, Rep.	3,871	2,863	2,000	212	252	207	203	172	161	164
Hong Kong	1,490	1,712	1,700	155	137	131	125	128	105	100
Taiwan	2,965	2,616	2,100	185	174	113	118	127	99	141
AFRICA	2,877	2,282	2,400	289	181	94	104	145	174	185
North Africa	1,986	1,569	1,700	216	108	44	67	73	122	125
Morocco	244	167	--	32	9	2	4	7	20	13
Algeria	322	315	--	57	28	15	13	20	28	25
Egypt	1,319	964	1,100	113	61	25	43	44	73	84
Sub-Sahara	891	713	700	73	73	51	38	72	51	60
Nigeria	190	116	--	14	8	7	11	19	20	13
S. Africa	309	222	--	20	29	14	7	16	11	15
LATIN AMERICA and CARIBBEAN	10,486	10,417	11,500	842	985	924	842	878	970	822
Brazil	588	579	600	41	24	35	24	36	23	28
Caribbean Islands	1,419	1,501	--	121	133	116	104	99	131	114
Central America	1,006	1,047	--	83	89	113	97	98	94	81
Colombia	631	543	--	38	56	53	49	67	38	41
Mexico	5,447	5,184	6,000	450	562	484	477	486	546	460
Peru	310	193	--	13	17	33	15	16	33	29
Venezuela	483	572	500	42	51	45	35	29	55	32
CANADA	6,146	6,795	7,200	528	596	611	627	645	577	534
OCEANIA	489	550	500	63	42	42	46	46	38	49
TOTAL	60,445	57,245	54,500	4,427	4,733	4,249	3,928	3,971	3,884	3,704
Developed countries	28,890	28,431	--	2,094	2,281	2,197	2,014	1,964	1,794	1,707
Developing countries	27,681	25,687	--	2,134	2,141	1,836	1,722	1,820	1,891	1,818
Other countries	3,873	3,128	--	199	311	217	191	187	199	179

F = Forecast. -- = Not available. Based on fiscal year beginning October 1 and ending September 30. 1. Austria, Finland, and Sweden are included in the European Union. 2. Asia forecasts exclude West Asia (Mideast). NOTE: Adjusted for transhipments through Canada, but transhipments are not distributed as previously for 1998. *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 F
						$ billion					
	Final crop output	81.5	83.3	81.0	89.0	82.4	100.3	95.8	115.6	112.5	104.3
	Food grains	8.2	7.5	7.3	8.5	8.2	9.5	10.4	10.7	10.6	8.6
	Feed crops	17.0	18.7	19.3	20.1	20.2	20.4	24.6	27.3	27.6	23.5
	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	17.5
	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	13.1
	Vegetables	11.6	11.5	11.6	11.9	13.5	13.9	14.9	14.6	15.1	16.0
	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	0.0
	Final animal output	83.8	90.2	87.3	87.1	91.7	89.7	87.6	92.2	96.2	93.5
	Meat animals	46.7	51.2	50.1	47.7	50.8	46.8	44.8	44.4	49.9	44.0
	Dairy products	19.4	20.2	18.0	19.7	19.2	19.9	19.9	22.8	21.0	23.7
	Poultry and eggs	15.4	15.3	15.2	15.5	17.3	18.4	19.1	22.3	22.2	22.8
	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 output[2]	181.0	188.7	183.7	191.3	190.7	207.9	202.8	228.5	230.8	220.2
Minus	Intermediate consumption outlays:	88.7	92.9	94.6	93.5	100.6	104.9	109.0	112.9	118.6	115.9
	Farm origin	38.1	39.5	38.6	38.6	41.2	41.3	41.6	42.7	45.7	43.2
	Feed purchased	20.7	20.4	19.3	20.1	21.4	22.6	23.8	25.2	25.2	24.0
	Livestock and poultry purchased	12.9	14.6	14.1	13.6	14.6	13.3	12.3	11.2	13.8	12.5
	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	28.7
	Fertilizers and lime	8.2	8.2	8.7	8.3	8.4	9.2	10.0	10.9	10.9	10.9
	Pesticides	5.0	5.4	6.3	6.5	6.7	7.2	7.7	8.5	8.8	8.9
	Petroleum fuel and oils	4.8	5.8	5.6	5.3	5.3	5.3	5.4	6.0	6.2	6.0
	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	7.1
	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
Plus	Net government transactions:	5.1	3.1	2.1	2.7	6.9	1.0	0.1	0.1	0.1	4.7
	+ Direct government payments	10.9	9.3	8.2	9.2	13.4	7.9	7.3	7.3	7.5	12.2
	- Motor vehicle registration and licensing fees	0.3	0.4	0.3	0.4	0.4	0.4	0.5	0.4	0.5	0.5
	- 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	109.0
Minus	Capital consumption	18.1	18.1	18.2	18.3	18.4	18.7	19.1	19.4	19.5	19.6
	Net value added[2]	79.3	80.7	73.0	82.1	78.6	85.3	74.8	96.3	92.8	89.4
Minus	Factor payments:	34.0	36.0	34.4	34.6	35.1	37.0	38.8	42.9	42.9	43.7
	Employee compensation (total hired labor)	10.7	12.5	12.3	12.3	13.2	13.5	14.3	15.4	16.0	16.8
	Net rent received by nonoperator landlords	9.4	10.0	9.9	11.2	11.0	11.8	11.8	14.3	13.2	12.8
	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	14.1
	Net farm income[2]	45.3	44.7	38.6	47.5	43.6	48.3	36.0	53.4	49.8	45.7

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 sectorís 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 operatorsí share of income from the sectorís 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	1998F
						$ 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	198.2
Crops[1]	76.9	80.3	82.1	85.7	87.6	93.1	101.1	106.6	112.1	104.2
Livestock	83.9	89.2	85.8	85.6	90.2	88.2	87.0	93.0	96.6	94.0
2. Direct Government payments	10.9	9.3	8.2	9.2	13.4	7.9	7.3	7.3	7.5	12.2
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	221.8
5. Cash expenses[3]	127.5	134.1	134.0	133.6	141.2	147.6	153.6	161.4	167.2	165.5
6. Net cash income (4-5)	52.8	52.8	50.4	55.1	59.0	50.7	51.8	56.4	60.8	56.4
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	221.8
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	-0.8
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	232.4
11. Total production expenses	146.7	153.3	153.3	152.9	160.5	167.5	174.1	182.4	188.4	186.7
12. Net farm income (10-11)	45.3	44.7	38.6	47.5	43.6	48.3	36.0	53.4	49.8	45.7

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 Households[1]

	1991	1992	1993	1994	1995	1996	1997P	1998F
				$ 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	5,241
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	49,692	--
				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	105.3	--
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 householdís 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	1998F
					$ billion					
Farm assets	814.4	841.5	844.9	870.3	906.4	938.3	981.9	1,033.9	1,088.8	1,129.5
Real estate	600.8	620.0	625.5	642.8	673.7	706.9	755.7	799.5	849.2	895.6
Livestock and poultry[1]	66.2	70.9	68.1	71.0	72.8	67.9	57.8	60.3	66.8	57.0
Machinery and motor vehicles	84.1	86.3	85.9	85.4	86.5	87.5	88.5	88.9	88.1	91.0
Crops stored[2,3]	23.9	23.2	22.2	24.2	23.3	23.3	27.4	31.7	29.9	30.0
Purchased inputs	2.6	2.8	2.6	3.9	3.8	5.0	3.4	4.4	5.1	5.0
Financial assets	36.8	38.3	40.5	43.1	46.3	47.6	49.1	49.1	49.7	50.0
Total farm debt	137.9	138.0	139.2	139.1	142.0	146.8	150.8	156.1	165.4	172.2
Real estate debt[3]	76.0	74.7	74.9	75.4	76.0	77.7	79.3	81.7	85.4	88.7
Non-real estate debt[4]	61.9	63.2	64.3	63.6	65.9	69.1	71.5	74.4	80.1	83.5
Total farm equity	676.6	703.5	705.7	731.3	764.4	791.5	831.1	877.8	923.4	957.2
					Percent					
Selected ratios										
Debt to assets	16.9	16.4	16.5	16.0	15.7	15.6	15.4	15.1	15.2	15.2
Debt to equity	20.3	19.6	19.7	19.0	20.4	19.0	18.6	18.5	18.1	17.8

Values in the last two columns are 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	Jul	Feb	Mar	Apr	May	Jun	Jul
					$ million					
Commodity sales[1]	188,108	199,580	208,665	15,634	13,980	15,818	14,338	13,917	14,715	15,168
Livestock and products	87,018	93,005	96,568	7,906	7,351	8,731	7,467	7,802	8,337	7,774
Meat animals	44,828	44,414	49,925	3,768	3,889	4,852	3,556	3,997	4,411	3,451
Dairy products	19,894	22,820	20,989	1,624	1,810	1,989	1,913	1,903	1,883	1,860
Poultry and eggs	19,070	22,345	22,183	1,954	1,434	1,655	1,781	1,674	1,772	1,903
Other	3,227	3,425	3,471	560	218	236	217	228	271	560
Crops	101,090	106,575	112,097	7,728	6,629	7,087	6,871	6,115	6,378	7,394
Food grains	10,417	10,741	10,603	1,567	520	532	376	362	1,017	1,517
Feed crops	24,581	27,265	27,638	1,792	1,912	1,768	1,256	1,115	1,355	1,482
Cotton (lint and seed)	6,851	6,983	6,515	97	494	283	301	274	180	93
Tobacco	2,548	2,796	2,886	86	120	43	61	0	0	66
Oil-bearing crops	15,496	16,362	19,911	748	1,245	1,214	879	694	621	777
Vegetables and melons	14,913	14,561	15,086	1,404	845	1,218	1,414	1,550	1,399	1,464
Fruits and tree nuts	11,119	11,933	12,790	1,088	511	616	757	737	914	1,048
Other	15,165	15,935	16,668	946	983	1,414	1,826	1,384	891	946
Government payments	7,279	7,340	7,496	25	93	52	75	80	89	167
Total	195,388	206,919	216,160	15,659	14,073	15,871	14,413	13,997	14,804	15,335

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	June 1998	July 1998	1996	1997	June 1998	July 1998	1996	1997	June 1998	July 1998
						$ million						
NORTH ATLANTIC												
Maine	262	258	18	18	220	228	6	16	482	486	24	35
New Hampshire	72	69	5	5	97	97	4	6	169	166	9	11
Vermont	433	416	38	37	99	97	4	16	532	513	42	52
Massachusetts	110	102	9	8	392	430	24	28	502	532	33	36
Rhode Island	11	9	1	1	73	74	3	5	84	83	4	6
Connecticut	236	218	16	17	253	279	11	14	489	496	27	31
New York	2,050	1,859	165	165	981	1,037	52	85	3,031	2,896	217	250
New Jersey	196	180	15	15	607	596	53	72	803	776	67	87
Pennsylvania	2,865	2,789	239	222	1,283	1,339	80	82	4,148	4,128	319	304
NORTH CENTRAL												
Ohio	1,943	1,869	148	157	2,853	3,476	134	240	4,796	5,345	282	397
Indiana	1,913	1,896	153	133	3,620	3,610	118	199	5,533	5,506	271	332
Illinois	2,063	1,937	162	130	6,453	7,339	265	362	8,516	9,276	427	492
Michigan	1,450	1,352	116	106	2,154	2,236	113	173	3,604	3,588	229	280
Wisconsin	4,299	4,070	393	391	1,732	1,686	79	106	6,030	5,756	473	497
Minnesota	4,147	4,054	357	325	4,654	4,101	222	247	8,800	8,155	579	572
Iowa	5,451	5,530	450	317	6,698	7,311	323	439	12,148	12,841	773	756
Missouri	2,463	2,795	201	177	2,409	2,768	111	145	4,872	5,564	312	323
North Dakota	539	611	55	51	2,891	2,702	123	119	3,429	3,313	178	170
South Dakota	1,634	1,820	162	138	1,875	2,417	104	143	3,509	4,237	266	282
Nebraska	5,277	5,542	488	395	3,933	4,550	154	210	9,211	10,092	642	604
Kansas	4,541	5,017	433	326	2,978	3,985	224	526	7,519	9,001	658	852
SOUTHERN												
Delaware	573	573	55	56	180	174	13	16	753	748	68	71
Maryland	901	915	84	84	639	623	38	65	1,540	1,538	122	149
Virginia	1,477	1,538	133	133	907	863	48	80	2,384	2,401	181	213
West Virginia	309	324	26	27	79	71	6	7	388	394	33	34
North Carolina	4,431	4,694	337	323	3,466	3,608	194	192	7,897	8,302	531	514
South Carolina	748	797	56	59	869	898	69	65	1,616	1,695	124	124
Georgia	3,279	3,442	285	307	2,452	2,445	219	128	5,731	5,887	504	435
Florida	1,206	1,265	100	98	5,038	4,978	379	217	6,244	6,243	479	316
Kentucky	1,727	1,978	139	402	1,842	1,655	54	50	3,569	3,633	193	453
Tennessee	999	1,005	98	82	1,406	1,287	69	50	2,405	2,292	167	132
Alabama	2,362	2,431	184	202	808	796	52	40	3,170	3,227	237	242
Mississippi	1,934	2,006	156	167	1,504	1,470	63	45	3,438	3,476	219	213
Arkansas	3,374	3,416	295	289	2,470	2,446	173	108	5,844	5,862	468	397
Louisiana	688	659	64	53	1,641	1,481	43	40	2,328	2,140	107	93
Oklahoma	2,414	3,061	284	246	1,105	1,308	234	171	3,519	4,369	518	417
Texas	7,821	8,184	787	581	5,139	5,277	352	417	12,960	13,461	1,139	998
WESTERN												
Montana	797	991	81	76	1,203	1,072	49	51	1,999	2,063	130	127
Idaho	1,330	1,389	163	148	2,043	1,926	80	78	3,372	3,315	243	226
Wyoming	478	646	44	70	189	199	6	8	667	845	50	78
Colorado	2,763	3,012	289	230	1,362	1,388	65	132	4,125	4,399	354	362
New Mexico	1,198	1,354	149	130	506	562	68	77	1,704	1,915	217	207
Arizona	840	888	77	56	1,306	1,257	97	61	2,145	2,145	174	117
Utah	644	715	59	63	228	238	14	21	872	953	73	84
Nevada	154	180	14	12	132	130	13	18	287	310	27	30
Washington	1,665	1,604	141	135	3,833	3,778	252	295	5,497	5,382	393	430
Oregon	658	740	75	74	2,246	2,373	141	208	2,904	3,113	216	282
California	6,212	6,294	529	532	17,285	18,995	1,344	1,481	23,497	25,289	1,873	2,012
Alaska	6	6	1	1	23	26	2	3	29	32	3	3
Hawaii	66	68	6	6	420	415	34	36	487	483	40	41
U.S.	93,005	96,568	8,337	7,774	106,575	112,097	6,378	7,394	199,580	208,665	14,715	15,168

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 realizd 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 Sevice 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	Jul	Aug P	Sept P	Jul	Aug P	Sept P
				$ billion					
Sales[1]									
At home[2]	354.2	367.6	380.2	34.3	31.0	30.1	225.2	256.3	286.4
Away from home[3]	280.8	288.5	297.9	26.5	26.6	25.0	174.0	200.7	225.6
				1995 $ billion					
Sales[1]									
At home[2]	367.3	367.4	371.0	32.9	29.7	28.9	216.5	246.2	275.1
Away from home[3]	287.7	288.5	289.7	25.1	25.2	23.5	165.9	191.0	214.6
				Percent change from year earlier ($ billion)					
Sales[1]									
At home[2]	3.8	3.8	3.4	4.9	-5.2	-0.7	3.9	2.7	2.3
Away from home[3]	4.5	2.7	3.0	1.0	-0.3	2.1	0.7	0.6	0.7
				Percent change from year earlier (1995 $ billion)					
Sales[1]									
At home[2]	0.5	0.1	1.0	2.9	-6.9	-2.3	2.0	0.8	0.5
Away from home[3]	2.2	0.3	0.2	-1.5	-2.8	-0.6	-1.8	-2.0	-1.8

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	Aug R	Mar	Apr R	May	Jun	Jul	Aug
Rail freight rate index[1] (Dec. 1984=100)										
All products	111.7	111.5	112.1	112.4	113.3	113.4	114.0	113.6	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	108.3	108.7	108.2	108.1	106.5
Barge freight rate index[1] (Dec 1990=100)										
Grain	172.6	129.5	107.1	93.9	90.9	93.0	86.9	94.5	--	--
Grain shipments										
Rail carloadings (1,000 cars)[3]	28.9	25.2	23.2	22.9	21.7	20.4	20.4	20.7	21.4	22.3
Barge shipments (mil. ton)[4,5]	3.5	3.1	2.4	2.9	--	--	--	--	--	--
Fresh fruit and vegetable shipments[6]										
Piggy back (mil. cwt)	1.3	1.1	1.1	0.8	0.9	0.9	1.3	1.1	0.8	0.7
Rail (mil. cwt)	1.9	1.6	1.7	0.9	1.1	1.2	1.1	1.5	1.5	0.6
Truck (mil. cwt)	40.5	35.7	42.6	39.6	39.9	44.5	50.3	51.7	42.2	39.4
Cost of operating trucks hauling produce[6]										
Fleet operation (¢/mile)	130.3	123.0	135.4	135.2	--	--	--	--	--	--

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, & Productivity[1]

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

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

Food Supply & Use

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

Commodity	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Lbs.					
Red meats[2,3,4]	119.5	115.9	112.3	111.9	114.1	112.2	114.8	115.1	112.8	111.0
Beef	68.6	65.4	63.9	63.1	62.8	61.5	63.6	64.4	65.0	63.8
Veal	1.1	1.0	0.9	0.8	0.8	0.8	0.8	0.8	1.0	0.9
Lamb & mutton	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8
Pork	48.8	48.4	46.4	46.9	49.5	48.9	49.6	49.0	45.9	45.6
Poultry[2,3,4]	51.9	53.9	56.3	58.3	60.8	62.5	63.3	62.9	64.4	64.8
Chicken	39.6	40.9	42.4	44.2	46.7	48.5	49.3	48.8	49.8	50.9
Turkey	12.4	13.1	13.8	14.1	14.1	14.0	14.1	14.1	14.6	13.9
Fish and shellfish[3]	15.1	15.6	15.0	14.8	14.7	14.9	15.1	14.9	14.7	14.5
Eggs[4]	31.8	30.5	30.2	30.1	30.3	30.4	30.6	30.2	30.5	30.7
Dairy products										
Cheese (excluding cottage)[2,5]	23.7	23.8	24.6	25.0	26.0	26.2	26.8	27.3	27.7	28.0
American	11.5	11.0	11.1	11.1	11.3	11.4	11.5	11.8	12.0	12.0
Italian	8.1	8.5	9.0	9.4	10.0	9.8	10.3	10.4	10.8	11.0
Other cheeses[6]	4.1	4.3	4.5	4.6	4.7	5.0	5.0	5.0	5.0	5.1
Cottage cheese	3.9	3.6	3.4	3.3	3.1	2.9	2.8	2.7	2.6	2.7
Beverage milks[2]	222.3	224.2	221.8	221.2	218.3	213.4	213.5	209.7	210.0	206.9
Fluid whole milk[7]	105.7	97.5	90.4	87.3	84.0	80.1	78.8	75.3	74.6	72.7
Fluid lowfat milk[8]	100.5	106.5	108.4	109.9	109.3	106.5	105.9	102.5	101.7	99.8
Fluid skim milk	16.1	20.2	22.9	23.9	25.0	26.7	28.7	31.9	33.7	34.4
Fluid cream products[9]	7.6	7.8	7.6	7.7	8.0	8.0	8.1	8.4	8.7	9.1
Yogurt (excluding frozen)	4.5	4.2	4.0	4.2	4.2	4.3	4.7	5.1	4.8	5.1
Ice cream	17.3	16.1	15.8	16.3	16.3	16.1	16.1	15.7	15.9	16.2
Ice milk	8.0	8.4	7.7	7.4	7.1	6.9	7.6	7.5	7.6	7.9
Frozen yogurt	--	2.0	2.8	3.5	3.1	3.5	3.5	3.5	2.6	2.1
All dairy products, milk equivalent, milkfat basis[10]	582.5	563.8	568.4	565.6	565.9	574.1	586.0	584.4	575.5	579.8
Fats and oils--total fat content	63.6	60.8	62.8	65.4	67.4	70.2	68.6	66.9	65.4	67.4
Butter and margarine (product weight)	14.8	14.6	15.3	15.0	15.4	15.8	14.7	13.7	13.5	12.8
Shortening	21.5	21.5	22.2	22.4	22.4	25.1	24.1	22.5	22.3	20.9
Lard and edible tallow (direct use)	2.6	2.1	2.4	3.1	4.1	3.9	4.7	4.9	5.3	4.7
Salad and cooking oils	26.3	24.4	24.8	26.7	27.2	26.8	26.3	26.9	26.1	28.7
Fresh fruits[11]	120.9	122.8	116.3	113.0	123.5	124.9	126.5	124.6	129.0	133.2
Canned fruit[12]	18.5	19.0	18.4	17.1	19.8	18.0	18.3	14.9	16.4	18.0
Dried fruit	3.3	3.3	3.1	3.0	2.8	3.0	3.0	2.8	2.8	2.7
Frozen fruit	3.4	3.7	3.5	3.5	3.8	3.4	2.9	4.2	3.9	3.2
Selected fruit juices[13]	68.3	70.5	66.2	66.6	63.6	74.9	71.6	75.6	75.3	75.2
Vegetables[11]										
Fresh	167.4	172.2	167.2	167.2	171.1	171.9	177.4	175.1	181.8	185.6
Canning	94.8	102.4	110.7	113.3	111.6	112.1	107.8	110.2	108.5	105.9
Freezing	64.2	67.6	66.8	72.7	70.8	75.1	79.5	79.9	83.9	81.5
Dehydrated and chips	27.5	28.2	29.0	31.2	30.1	31.0	30.7	30.0	33.1	33.6
Pulses	7.5	6.3	7.1	7.8	8.2	7.7	8.5	8.5	8.0	8.5
Peanuts (shelled)	6.9	7.0	6.0	6.5	6.2	6.0	5.8	5.7	5.7	5.8
Tree nuts (shelled)	2.3	2.2	2.4	2.2	2.2	2.2	2.3	1.9	2.0	2.2
Flour and cereal products[14]	175.5	174.5	182.0	183.6	186.2	191.0	194.1	192.5	198.4	200.1
Wheat flour	131.7	129.6	136.0	136.9	138.8	143.3	144.5	141.8	148.8	149.7
Rice (milled basis)	14.3	15.2	16.2	16.8	17.5	17.6	19.3	20.1	18.9	19.5
Caloric sweeteners[15]	132.7	133.1	137.0	138.0	141.2	144.4	147.4	149.9	150.3	--
Coffee (green bean equiv.)	9.8	10.1	10.3	10.3	10.0	9.1	8.2	8.0	8.9	9.3
Cocoa (chocolate liquor equiv.)	3.8	4.0	4.3	4.6	4.6	4.3	3.9	3.6	4.2	4.1

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

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

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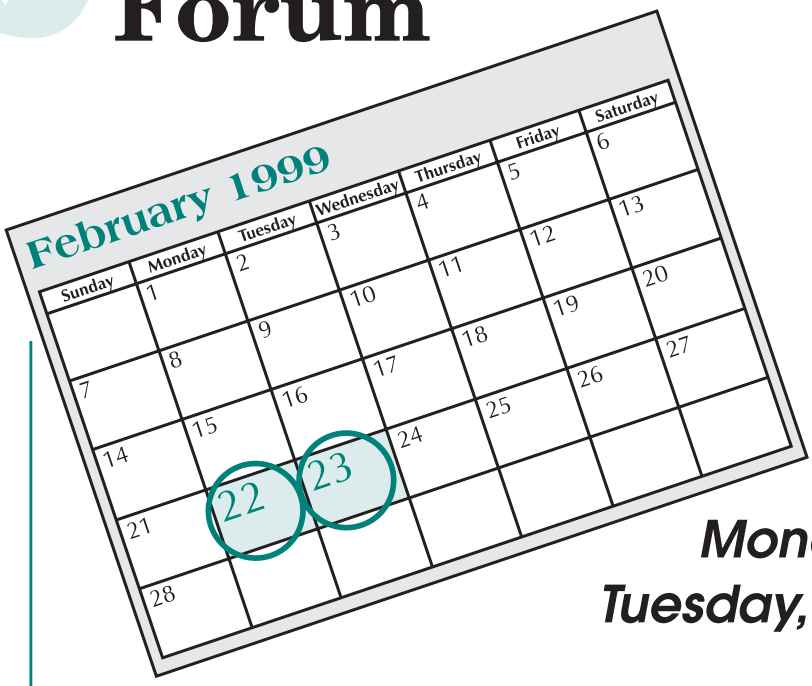

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