

AGRICULTURAL OUTLOOK

Economic Research Service
United States Department of Agriculture •

August 1993

FILE COPY

U.S. Grain Trade
Prospects Rising?

Organic Food
Standards In
The Works

August 1993/AO-199

AGRICULTURAL OUTLOOK



Departments

2 Agricultural Economy

What's Behind the U.S. Ag Trade Surplus

*Stephen MacDonald
& Joel Greene*

20 Commodity Spotlight

World Grain Trade To Shrink in 1993/94

Pete Riley & Sara Schwartz

24 Environment & Resources

Measuring Air Pollution in Farm Areas

David A. Westenbarger

26 Food & Marketing

Organic Certification: Standards in the Works

Julie Anton & Betsy Frazao



Special Article

32 Asia in the 1990's:

Agricultural Trade Prospects

Rip Landes & Mark Giordano

Statistical Indicators

40 Summary

41 U.S. & Foreign Economic Data

42 Farm Prices

43 Producer & Consumer Prices

45 Farm-Retail Price Spreads

46 Livestock & Products

50 Crops & Products

54 World Agriculture

55 U.S. Agricultural Trade

58 Farm Income

63 Food Expenditures

64 Transportation

64 Indicators of Farm Productivity

65 Food Supply & Use



Economics Editor—Cathy Greene (202) 219-0313

Associate Editor—Robert Dismukes (202) 219-0313

Managing Editor—Mary Reardon (202) 219-0494

Overview Coordinators—Richard Stillman, Agnes Perez, Livestock;
Joy Harwood, Carol Whitton, Field Crops; Glenn Zepp, Specialty Crops

Statistical Coordinator—Ann Duncan (202) 219-0313

Design & Layout Coordinator—Victor Phillips, Jr.

Editorial Staff—Karen Sayre

Tabular Composition—Joyce Bailey, Cliola Peterson

The contents of this magazine have been approved by the World Agricultural Outlook Board and the summary released July 19, 1993. Price and quantity forecasts for crops are based on the July 12 World Agricultural Supply and Demand Estimates.

Materials may be reprinted without permission. *Agricultural Outlook* is printed monthly except for the January-February combined issue.

Annual subscription: \$35 (\$43.75 for foreign addresses, including Canada). Order from ERS-NASS, 341 Victory Drive, Herndon, VA 22070. Or call toll free, 1-800-999-6779 (U.S. and Canada only). All other areas, please call (703) 834-0125. Make check payable to ERS-NASS.

Time to renew? Your subscription to *Agricultural Outlook* expires in the month and year shown on the top line of your address label. Renew by calling 1-800-999-6779.

The next issue of *Agricultural Outlook* (AO-200) is scheduled for mailing on September 3, 1993. If you do not receive AO-200 by September 24, call the managing editor at (202) 219-0494 (be sure to have your mailing label handy). The full text of AO-200 will also be distributed electronically; additional information on this is available at (202) 720-5505.

News of Midwest Floods, 1993/94 World Grain Trade Outlook, Asian Markets, and Labeling of Organic Foods

Commodity Overview

Crop projections revised: On July 12, USDA revised its June projection of 1993/94 corn production downward by 650 million bushels (8 percent), reflecting severe flooding and excess moisture in the Midwest. The soybean projection was pushed down by 70 million bushels (3 percent) from the June projection. Crop losses from adverse weather are concentrated in Illinois, Iowa, Minnesota, Missouri, Nebraska, South Dakota, and Wisconsin. Continued heavy rains and flooding since the July assessment will be taken into account in a survey of crop production prospects to be released on August 11.

Damage to crops in the flooded areas indicated in the initial assessment is expected to have minimal impact on food prices in the U.S. overall, although increases in distribution costs and regional prices are expected in flooded areas.

Agricultural Economy

Ag surplus to strengthen: The positive trade balance for U.S. agriculture is projected to grow even larger by the end of the decade. Despite the current stagnation in U.S. exports that has come with the slowdown in the world economy, the outlook is for economic growth to pick up abroad and trade liberalization to continue generating export opportunities.

The U.S. has maintained an agricultural trade surplus of about \$18 billion over the last 5 years, as exports of grains rebounded from mid-1980's levels and exports of fruits, vegetables, and other high-value products expanded dramatically. Bulk products like grains and soybeans have accounted for the largest portion of the total U.S. farm trade surplus during this period. But the growing U.S. trade in high-value products (HVP), despite deficits with some major HVP suppliers, contributed more than bulk products to the \$13-billion leap in the agricultural trade surplus since 1986.



Commodity Spotlight

Grain trade shrinks: The 1993/94 outlook for world trade in wheat and coarse grains is for a drop of nearly 10 million tons from 1992/93 to 190 million, with wheat trade declining slightly and coarse grains dropping sharply. U.S. grain exports are projected to mirror this pattern—down 10 million tons, to 79.3 million. In the world wheat market, competitors' large exportable supplies, and weaker import demand, are projected to account for the decline in U.S. exports. For coarse grains, shrinking import demand for corn will be the key factor reducing U.S. exports.

Environment & Resources

Air pollution in farm areas: Evidence that air pollution is damaging to agricultural crops has been mounting for several decades. Results from new air pollution indexes indicate that while many regions have seen dramatic improvements in overall air quality in the 1980's, some still experience high levels of certain pollutants. These indexes, combined with county-level farm data from the 1987 Census of Agriculture, show that pollution is still heavy in some farm areas.

Food & Marketing

Certified organic?: Development of regulations to implement the Organic Foods Production Act is underway. Passed by Congress in 1990, the act calls for national standards to define organic food. USDA, using recommendations from a 14-member National Organic Standards Board (NOSB), is charged with developing uniform standards for incorporation into the regulations.

The organic food industry, which had lobbied for passage of the act, has been instrumental in helping the board develop its recommendations. Among the issues still unresolved: labeling policy for products with less than 95-percent certified organic ingredients, livestock medications, and a national list of prohibited natural inputs and allowed synthetic materials in production and processing.

World Agriculture & Trade

Asian markets expanding: Strong growth in Asian demand for major U.S. agricultural products is projected to continue through the 1990's, driven by the strong performance of Asia's varied economies. Asia became the largest regional market for U.S. agricultural exports during the 1980's, and is expected to continue in that role during the decade ahead.

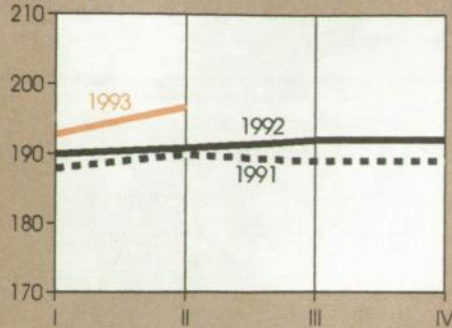
Demand by Japan and the industrializing East Asian markets, which account for most Asian farm imports, will continue to shift away from bulk commodities and toward processed products. The developing economies of Southeast and South Asia are expected to show the fastest growth in farm imports, primarily of bulk commodities. China, which is expected to increase wheat imports and reduce exports of corn and soybeans, also creates the most questions in the projection, because of uncertainty about the impacts of its future economic reform.

Agricultural Economy

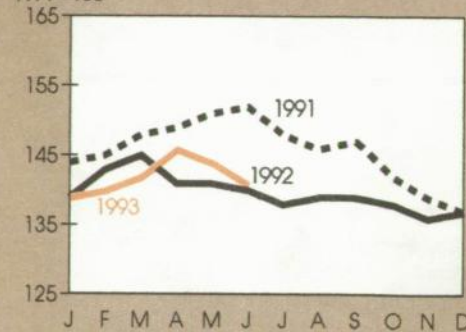
Prime Indicators

Index of prices paid by farmers

1977=100

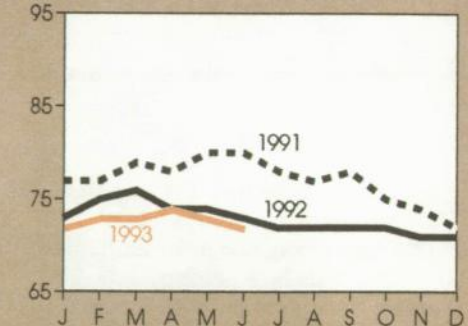
Index of prices received by farmers¹

1977=100

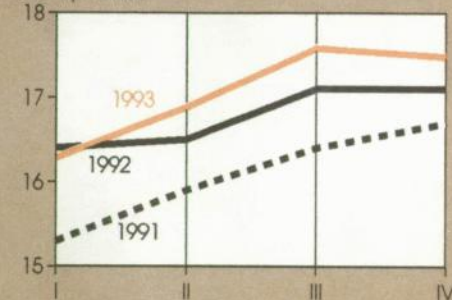


Ratio of prices received/prices paid

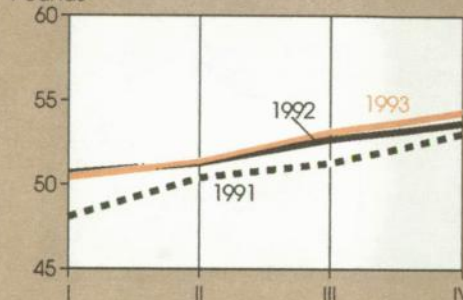
Percent

Total red meat & poultry production²

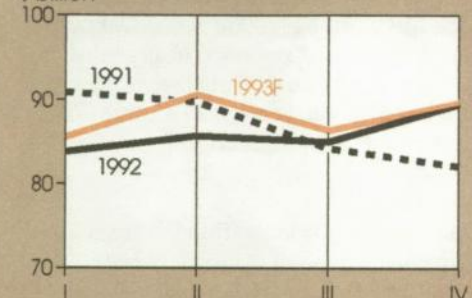
Billion pounds

Red meat & poultry consumption, per capita^{2,3}

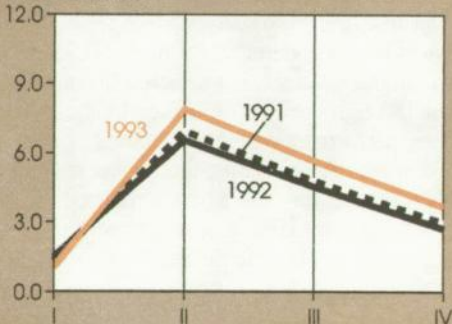
Pounds

Cash receipts from livestock & products⁴

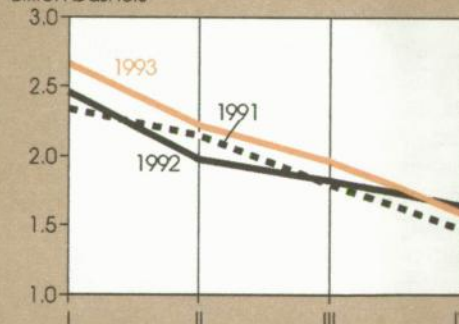
\$ billion

Corn beginning stocks⁵

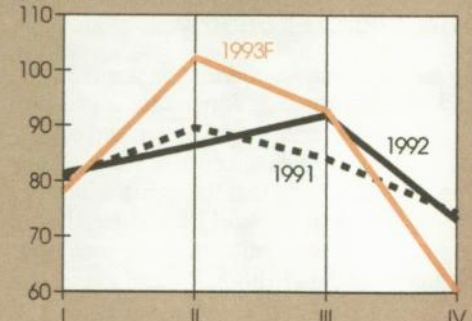
Billion bushels

Corn disappearance⁵

Billion bushels

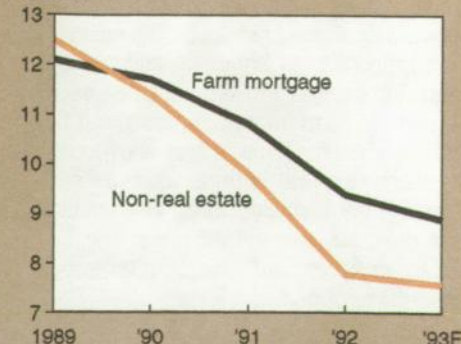
Cash receipts from crops⁴

\$ billion



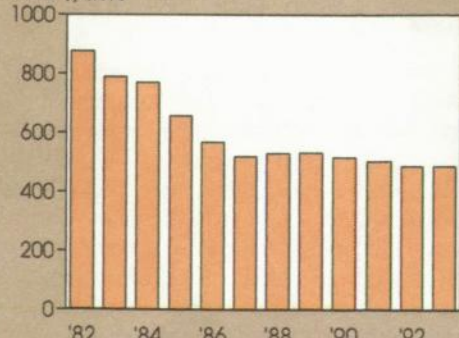
Farm loan interest rates

Percent



Average real value of farm real estate

1982 \$/acre



Farm value/retail food costs

Percent



¹For all farm products. ²Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. ³Retail weight. ⁴Seasonally adjusted annual rate. ⁵I=Sept.-Nov.; II=Dec.-Feb.; III=Mar.-May.; IV=June-Aug. Marketing years ending with year indicated. F=forecast.



Port of New Orleans

What's Behind The U.S. Ag Trade Surplus

Exports have long been a crucial factor in the economic vitality of U.S. agriculture. In some years, export markets absorbed more than 20 percent of all agricultural production, and more than half of U.S. bulk commodities such as wheat, cotton, and soybeans.

Agriculture's trade surplus climbed sharply after fiscal 1986, helping alleviate financial stress in some traditionally export-dependent agricultural sectors and opening new opportunities in other, non-traditional sectors. Grain trade saw the largest gain in its surplus, but high-value products (HVP) trade moved from deficit to a small surplus, and the deficit for tropical products declined.

Traditionally, the health of the nonagricultural sectors of the U.S. economy has been less dependent on trade. But exporting and importing are playing an increasingly important role in these sectors as well. Between 1986 and 1992, burgeoning exports and slowing imports narrowed the U.S. trade deficit (excluding agriculture) from \$160 billion to \$92 billion. As a result, trade was the major source of growth in the U.S. economy

from the mid-1980's until 1992, and in the long run, trade is expected to remain a source of expansion for U.S. agriculture and the rest of the economy.

Recently, however, both U.S. agricultural and nonagricultural trade have lost some of their momentum. The change has been most pronounced in the nonagricultural sectors, where the trade deficit widened by \$20 billion during the first 7 months of fiscal 1993.

Agriculture still maintains its trade surplus—which it has enjoyed for more than 30 years—but the surplus has stalled at around \$18 billion since fiscal 1989. In the longer term, the surplus is expected to move up again. But during fiscal 1993 it is expected to fall slightly, from \$18.1 billion to \$17.5 billion.

Trade Trends in Products & Regions

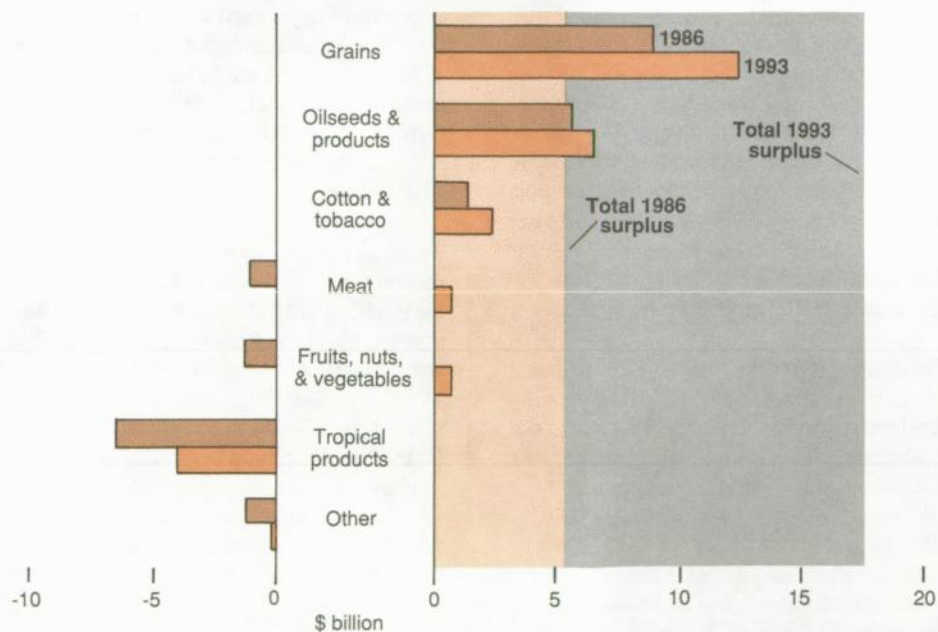
In agricultural trade, in contrast with the nonagricultural sectors, exports are far more significant than imports in determining the trade balance. Export growth drove the farm trade surplus to a record \$27 billion at the beginning of the

1980's, and falling exports accounted for most of the decline to \$5 billion in 1986, and the subsequent rebound. Exports have largely stagnated since 1989—generally ranging from \$40 to \$42 billion—while imports have risen slightly. The net result has been a trade surplus of about \$18 billion over the last 5 years.

Grains and grain products earn the largest trade surplus of any U.S. farm product category, averaging about \$13 billion during the past 5 years. They account for much of the surplus in bulk products and most of the change in the surplus. Much of the rebound in the U.S. farm trade surplus after 1985 resulted from grain exports responding to lower loan rates, and increased use of the Export Enhancement Program (EEP) and other programs.

The U.S. markets accounting for much of the change in surplus since 1986 have been Japan and the former Soviet Union (FSU), which are typically the major U.S. markets for grain. U.S. grain and other agricultural imports from these two markets are insignificant. For Japan, this is in marked contrast to the two-way trade in nonagricultural products and the persistent \$50-billion U.S. deficit in total trade. As the U.S. regained competitiveness in world grain markets after 1986,

Fruits, Vegetables, and Meat Move from Deficit to Surplus



Net value of trade. Fiscal years. 1993 forecast.

"Other" includes live animals, dairy products, eggs, and seeds.

Agricultural Economy

its farm surplus with Japan rose from \$5 billion to \$8 billion expected in fiscal 1993, despite little change in the nonagricultural trade balance. In the same period, the surplus of agricultural trade with the FSU rose from \$500 million to nearly \$2 billion.

These gains could stall over the next few years. Economic restructuring in the FSU has led to a dramatic contraction of the economy and a reduction in livestock numbers. The downturn of Japan's economy has cut its nonagricultural imports from the U.S. and slowed growth in its imports of fruits, vegetables, and other high-value products (HVP), and the overall U.S. trade deficit with Japan is rising this year.

A slowdown in economic growth has also helped erode the U.S. trade position with Europe. The European Community (EC) has been the second-largest surplus market for U.S. farm commodities in recent years, but the surplus has stabilized at \$2.5 billion since 1986. In contrast, one of the largest sources of improvement in nonagricultural trade has been a \$35-billion shift in trade with the EC-12 from deficit to substantial surplus. The agricultural-nonagricultural trade position with the EC is nearly the reverse of the trade relationship with Japan.

The difference is due to Europe's greater income elasticity for nonagricultural imports and its greater potential for agricultural production, aided by the EC's Common Agricultural Policy (CAP). The CAP ensured that despite the recovery of U.S. competitiveness in global markets, grain exports to the EC did not rebound. Most of the gain in exports to the EC since 1986 has come in HVP, and has been largely offset by parallel increases in HVP imports from the EC.

With a strengthening of the U.S. dollar against European currencies this year, and recession in Germany, France, and Italy, overall U.S. trade with Europe can be expected to lose some momentum. While increased soybean exports to Europe are boosting the 1993 U.S. agricultural trade surplus with the EC, the nonagricultural surplus has weakened by several billion dollars in the last few months.

Tropical Product Trade Largest Deficit

In addition to markets like Japan and the former USSR which provide virtually no agricultural imports to the U.S., and markets such as the EC where trade is in both directions, the U.S. maintains large trade deficits with some regions of the world.

The highest U.S. agricultural trade deficits in 1992 were with South America at \$2.6 billion, Oceania (mainly Australia and New Zealand) at \$1.6 billion, Central America at \$909 million, and Southeast Asia at \$844 million. Latin American countries accounted for 7 of the 10 highest trade deficits, and Brazil is the perennial leading deficit partner.

The commodity group with the largest deficit is tropical products, such as coffee and cocoa. The U.S. agricultural trade deficits are typically with trading partners that export tropical products. Australia and New Zealand, which export primarily beef to the U.S., are the major exceptions.

Coffee was the highest valued single farm commodity imported into the U.S., before being surpassed by beef in 1991. Cocoa has usually been the third or fourth highest. On average, coffee and cocoa have accounted for 24 percent of the value of all agricultural imports since 1976, and 65 percent of the value of imports not competing with U.S. production. In 1986, such noncompetitive imports reached a record-high value of \$7.8 billion.

Trade in coffee and cocoa is the principal reason the U.S. regularly has an agricultural deficit with Brazil of over \$1 billion a year. The U.S. agricultural trade deficit with Brazil peaked at \$1.9 billion in 1985, dipped to \$1.2 billion in 1992, and will likely fall slightly in fiscal 1993. Brazil has alternated as first or second leading supplier of coffee and cocoa to the U.S. On average, coffee accounted for 40 percent of Brazil's export value to the U.S. from 1976 to 1992.

Since 1986, coffee and cocoa prices have fallen sharply, driving down the value of noncompetitive imports. Spot prices for coffee averaged \$4,380 per ton in 1986, and the average for cocoa was \$2,020 per ton. In fiscal 1992, average prices had dipped to \$1,106 per ton for coffee and \$1,103 for cocoa. That year, record volumes of coffee and cocoa were imported into the U.S., but lower prices have trimmed the value of tropical product imports as well as the deficit in tropical products. In fiscal 1986, the U.S. had a \$6.6-billion deficit in tropical products, but by 1992 it had shrunk to \$4.1 billion.

Brazil's surplus position with the U.S. has weakened somewhat with the sustained weakness in coffee and cocoa prices, but this is somewhat offset by Brazil's domination of U.S. orange juice imports and a considerable increase in unmanufactured tobacco exports in 1993. Southeast Asia and Central America have also seen their surpluses with the U.S. shrink in recent years, due in part to weakness in prices of tropical products.

HVP Trade Growing In Both Directions

In contrast with U.S. grain trade, which is virtually confined to exports, and tropical products, largely limited to imports, a wide array of HVP's are both exported and imported. Trends have generally been favorable for U.S. HVP trade, and just as HVP exports have risen to surpass exports of bulk products, they have also surpassed HVP imports. Despite growing deficits with some major HVP suppliers between 1986 and 1992, HVP trade contributed more to the \$13-billion agricultural trade balance turnaround than did bulk products.

Although imports of fresh fruits and vegetables have been rising as U.S. diets diversify and winter consumption grows, exports have grown faster. The balance of trade in fruits, nuts, and vegetables has moved from deficit to surplus. Similarly, growing exports of meat have overtaken imports, transforming the deficit into a surplus.

Agricultural Economy

U.S. Exports of Corn, Beef, and Soybeans Build Ag Trade Surplus with Japan

Trading partner	Fiscal 1992 U.S. ag trade			Major commodities	
	Exports	Imports	Balance	Exported by U.S.	Imported by U.S.
	— — \$ billion — —				
Japan	8.4	0.3	8.1	Corn, beef, soybeans	Processed vegetables, noodles, beer
Former USSR	2.7	—	2.7	Corn, wheat, soybean meal	Casein, fur skins
EC-12	7.7	5.2	2.5	Soybeans, corn gluten, tobacco	Wine, beer, dairy products, processed vegetables
South Korea	2.2	0.1	2.1	Cattle hides, cotton, soybeans	Processed vegetables, noodles
Taiwan	1.9	0.1	1.8	Corn, soybeans, wheat	Processed vegetables, confectionery products, noodles
Mexico	3.7	2.3	1.4	Sorghum, soybeans, beef	Fresh vegetables, cattle, fresh fruit
Canada	4.8	3.9	0.9	Fresh fruits & vegetables, beef	Cattle, pork, beef, canola
Hong Kong	0.8	0.1	0.7	Poultry, fresh fruit, cotton	Canned mushrooms, soy sauce
Egypt	0.7	—	0.7	Wheat, cotton, corn	Spices
China	0.7	0.4	0.3	Wheat, cotton	Canned mushrooms & water chestnuts, feathers & down
Turkey	0.3	0.7	-0.3	Tobacco, rice, vegetable oils	Tobacco
Thailand	0.3	0.7	-0.3	Cotton, wheat, soybeans	Processed fruits & vegetables, rice
Chile	0.1	0.5	-0.4	Corn, sugar, soybean meal	Fresh fruit, fruit juices
Costa Rica	0.1	0.5	-0.4	Corn, soybeans, wheat	Fresh fruit, coffee, beef
Indonesia	0.4	0.8	-0.4	Cotton, soybeans, fresh fruit	Rubber, cocoa
Colombia	0.1	0.9	-0.7	Corn, wheat, tallow	Coffee, cut flowers, bananas
New Zealand	0.1	0.8	-0.8	Processed fruits & vegetables, soybean meal, wheat	Beef, dairy products, fresh fruit
Australia	0.3	1.1	-0.8	Processed fruits & vegetables, tobacco	Beef, wool, sugar
Brazil	0.1	1.4	-1.2	Hops	Coffee, orange juice, cocoa

Top U.S. export markets and import suppliers. — = Less than \$100 million. Balance may not equal exports minus imports due to rounding.

The two-way nature of HVP trade is highlighted by beef and fruit trade. With U.S. beef imports steadily rising since the mid-1980's, the agricultural deficit with Australia and New Zealand grew from \$1.2 to \$1.8 billion between 1986 and 1993. But at the same time, U.S.

beef exports expanded more rapidly in Japan, Canada, Korea, and Mexico, and beef exports exceeded beef imports for the first time in 1992.

Similarly, rising fruit imports led to an expanded trade deficit with Chile. U.S.

fruit imports from Chile skyrocketed after 1985, and a U.S. agricultural trade surplus with Chile was rapidly transformed into a \$400-million deficit. Chile was the largest U.S. supplier of imported grapes, peaches, pears, and plums in 1992, supplying 34 percent of all

Agricultural Economy

imported fresh fruit. Increased U.S. competitiveness drove U.S. fruit exports steadily higher after 1985, and the deficit in fruit trade shrank from \$1.1 billion in 1986 to an estimated \$500 million in 1993.

Between 1986 and 1992, favorable changes in exchange rates, strong economic growth overseas, and trade liberalization in key markets such as Japan, Canada, and Mexico assured soaring HVP exports. A key question is whether the upswing can be sustained, and what the future holds for international economic trends and the international trade picture for HVP's as well as other sectors.

Short-Term Outlook Stable

Recent developments in the world economy have dampened the outlook for U.S. trade in the short term. In 1992, the U.S. GDP growth rate surpassed growth in the rest of the industrialized world for the first time since 1987. Late in 1992, the U.S. dollar began gaining strength against European currencies. Bucking the general upward trend for less developed countries, Mexico's GDP growth has decelerated recently, and the government has temporarily imposed new tariffs on livestock products. Since 1988, Japan has been liberalizing its beef import regime in line with the U.S.-Japan Beef and Citrus Agreement. The last step, agreed to in 1988, was completed this year.

These factors suggest that the rapid gains the U.S. achieved in exports of both farm products and other products are likely to slow. On the other hand, imports of both are likely to continue to grow as the U.S. economy expands and consumers diversify their diets and demand off-season produce. The U.S. trade balance for non-agricultural products is likely to weaken under these circumstances, and the agricultural trade surplus is likely to show little improvement. But in the longer term, improvement is likely for both.

Slow Improvement In the Long Run

In the long run, the dollar is expected to stabilize, in contrast to its recent strength, and the U.S. is expected to experience slower economic growth than other countries. As a result, exports will grow. While imports are likely to continue growing as economies become more interdependent and production moves to its most advantageous locations, agricultural exports are likely to grow more rapidly than imports.

Over the past 30 years, HVP exports have tended to parallel U.S. gains and losses in nonagricultural exports. The broad consensus on the long-run outlook indicates a favorable nonagricultural balance, which suggests a positive outlook for HVP trade.

Assuming a continuation of the long-term trends in prices and U.S. consumption, a significantly increased deficit in tropical products is not likely. For bulk agricultural products, exports are expected to increase, although uncertainties cloud the long-term outlook, partly because of the possibility of a GATT accord, and partly because of developments in the countries of the former Eastern Bloc. World trade in most bulk products is likely to expand more quickly in future years than in the 1980's. But the high growth rates of the 1970's, with burgeoning trade demand from both developing (LDC) and centrally planned countries, are not expected to be repeated.

As the LDC's emerge from the debt constraints of the last decade, the formerly centrally planned countries are restructuring. Rather than a resurging demand for imports, increases in exports from the former Soviet Union and Eastern Europe are likely. On the other hand, China, one of the fastest growing economies in the world, has a vast head start in restructuring and could see greater growth in imports than exports.

As world bulk trade grows in the coming years, the U.S. can be expected at least to retain its current market share. CAP reform in the EC, a favorable U.S. exchange rate, continued favorable domestic policies in the U.S., and continued progress in trade liberalization—bilateral as well as multilateral—all suggest that the U.S. share could rise. Assuming stability in prices, bulk exports—and the overall U.S. agricultural trade surplus as well—should grow in the long run.

[Stephen MacDonald and Joel Greene (202) 219-0822] **AO**

Field Crops Overview

Recent flooding and excess moisture in the western Corn Belt have contributed to lower U.S. corn and soybean output projections for 1993. Projected 1993/94 ending stocks for both crops are expected to be considerably tighter than expected last month, and price projections have been revised upward. With lower acreage projected for rice, stocks are also expected to be tighter than last month's projections, while wheat and cotton stock forecasts have been revised upward.

In the world market, 1993/94 trade prospects for rice and soybeans, like those for wheat and corn, decline as imports stagnate or slide. (See article on the 1993/94 global grain outlook.) Cotton trade, however, is anticipated to expand as improved world economic growth raises textile use.

Domestic Outlook—July Projections for 1993/94

Corn Production Revised Downward

Corn output in 1993 is projected down considerably from last year's record, and below the June projection. Planted area is down from last year due largely to the

higher ARP, while flooding, excess moisture, and later-than-normal planting in the western Corn Belt this season have increased expected abandonment and reduced yield prospects. With total supplies projected to fall by more than total use, ending stocks are forecast down markedly from carryin. The season-average price in 1993/94 is projected well above this year's level.

- Corn production in 1993, projected at 7.85 billion bushels, is down 17 percent from last year's record. Based on June planting intentions and a lower-than-normal ratio of harvested to planted acreage, harvested

area is projected down 5.6 million acres from last year. The projected yield, adjusted down due to adverse weather, is more than 13 bushels per acre below last year's record.

- Total use is projected down slightly in 1993/94, at 8.35 billion bushels. FSI use is expected up, largely due to greater use of ethanol in gasoline blends. Also, feed and residual use is expected to be higher as livestock production continues to expand. However, lower world coarse grain demand, especially in southern Africa, is dampening the export outlook.

- Ending stocks in 1993/94 are projected at 1.6 billion bushels, down 23 percent from expected carryin. The season-average price is forecast in the range of \$2-\$2.40 per bushel for 1993/94, above this year's \$2.05-\$2.10.

Crop ratings as of July 18 were generally fair to good, and tended to be relatively high in the eastern Corn Belt and the Central and Southern Plains. Crop progress is well behind schedule in the Corn Belt due to cooler-than-normal temperatures and moist conditions throughout much of the area.

- Nationally, 49 percent of the corn crop rated good or excellent as of July 18, 35 percent rated fair, and 16 percent rated poor or very poor. But excess moisture in the western Corn Belt resulted in relatively poorer ratings in that area, with the worst conditions reported in Minnesota, where 58 percent of the crop rated poor or very poor, and only 6 percent rated good or excellent. Ratings were also relatively low in the Southeast, where dryness has been a severe problem.
- Corn development was reported well behind normal as of July 18, with 14 percent silking nationally, behind the 5-year average of 38 percent. In Iowa, 1 percent of the corn crop was silking as of July 18, compared with a 5-year average of 31 percent; in Illinois, 21 percent was silking, compared with a 64-percent average.

U.S. Field Crops—Market Outlook at a Glance

	Area		Yield	Output	Total supply	Domestic use	Exports	Ending stocks	Farm price
	Planted	Harvested							
	— Mil. acres —	Bu/acre							
Wheat									
1992/93	72.3	62.4	39.4	2,459	3,001	1,117	1,355	529	3.24
1993/94	72.1	64.2	40.5	2,601	3,205	1,264	1,200	741	2.45-2.85
Corn									
1992/93	79.3	72.1	131.4	9,479	10,584	6,760	1,700	2,124	2.05-2.10
1993/94	74.3	66.5	118.0	7,850	9,979	6,850	1,500	1,629	2.00-2.40
Sorghum									
1992/93	13.3	12.2	72.8	884	937	483	275	180	1.85-1.90
1993/94	11.0	10.1	66.0	665	845	433	275	137	1.85-2.25
Barley									
1992/93	7.8	7.3	62.4	456	596	364	80	152	2.04
1993/94	7.9	7.5	61.3	462	634	380	80	174	1.90-2.30
Oats									
1992/93	8.0	4.5	65.6	295	474	355	6	113	1.32
1993/94	8.1	4.2	63.3	263	441	335	5	101	1.20-1.60
Soybeans									
1992/93	59.3	58.4	37.6	2,197	2,477	1,412	775	290	5.50
1993/94	59.5	58.0	34.1	1,975	2,270	1,365	680	225	5.75-7.00
Lb/acre — — — Mil. cwt (rough equiv.) — — — \$/cwt									
Rice									
1992/93	3.17	3.13	5,722	179.1	212.4	97.5	79.0	35.9	5.90-6.00
1993/94	3.02	2.97	5,657	168.0	210.4	100.5	80.0	29.9	4.50-6.00
Lb/acre — — — — — Mil. bales — — — — — ¢/lb									
Cotton									
1992/93	13.2	11.1	699	16.2	19.9	9.9	5.3	4.6	54.60*
1993/94	13.7	12.6	680	17.8	22.4	10.3	6.3	5.8	**

Based on July 12, 1993 World Agricultural Supply and Demand Estimates; U.S. marketing years for exports.

*Weighted-average price for August 1-April 1; not a season average.

**USDA is prohibited from publishing cotton price projections.

See table 17 for complete definition of terms.

Smaller Soybean Crop To Boost Prices

Expected 1993 soybean production is down from the June projection, and well below the large crop realized last year. July projections for both planted and harvested area have been revised to reflect excessive moisture and flooding in the upper Midwest. Likewise, yields have been revised to reflect late plantings and

Agricultural Economy

Flooding in Midwest: The Impacts Assessed

Flooding and excess moisture in the Midwest have led to losses that are concentrated in seven states: Illinois, Iowa, Minnesota, Missouri, Nebraska, South Dakota, and Wisconsin. Iowa is having its wettest year since records began in 1873, while other states have also been affected by excess moisture. June rainfall in much of the western Corn Belt was more than 200 percent of normal, with many localities exceeding 10 inches for the month. During July 1-12, rainfall continued to exceed 200 percent of normal, and in some areas, over 700 percent.

Because of these extraordinary weather conditions in the upper Mississippi and lower Missouri Valleys, national acreage estimates reported on June 30 in the *Acreage* report of USDA's National Agricultural Statistics Service (NASS) have been adjusted downward for corn and soybeans. The adjustments reported in the July 12 *World Agricultural Supply and Demand Estimates* (WASDE) reflect prevented planting and abandonment likely to result from excessive rainfall in some areas between mid-June and early July.

USDA's July 12 supply and demand estimates for field crops provide a rough indicator of the magnitude of losses for corn and soybeans. The 1993/94 U.S. corn output projection for July is 650 million bushels (8 percent) less than projected in May and June, and the midpoint of the 1993/94 farm price forecast for corn is \$2.20 per bushel, up from the June midpoint projection of \$2.05. For soybeans, 1993/94 production is expected down 70 million bushels (3 percent) from the June projection, and the season-average price is pegged at \$6.38 per bushel, up from the June projection of \$5.85.

The corn and soybean yield projections reported July 12 reflect time series analysis and judgment, as in May and June, supplemented with qualitative information on the probable impact of weather through July 12. The first survey-based forecasts of area, yield, and production for corn and soybeans (as well as for cotton and rice) as

reported by NASS, will appear in the August 11 issues of *WASDE* and *Crop Production*—and in the September issue of *AO*. The information for the August issues is normally based on a NASS survey of a subsample of the farmers contacted for the June *Acreage* report. Because of the extraordinary weather conditions, a larger subsample of farmers than usual was contacted for the August reports.

Little Change in Food Price Outlook

The reduction in crop production in the upper Midwest due to floods and excess moisture will not have a large impact on the Consumer Price Index for food in the U.S. overall. In the area affected by floods, some increases are expected—food distribution costs will likely rise because of damage to wholesale and retail facilities.

From a national perspective, damage to crops in the flooded areas will have a minimal effect on food prices. The area affected is much smaller than in previous disasters such as the 1983 and 1988 droughts, which covered the entire Corn Belt and most of the eastern half of the country. The farm commodities affected are also limited—primarily to soybeans and corn—while a broader range of crops was damaged in the 1983 and 1988 droughts.

Soybeans and corn are used primarily for animal feeds and vegetable oils. However, U.S. meat supplies are ample and meat prices have been strong enough that increases in feed costs are likely to have only modest effects on meat production and prices. Corn and vegetable oils are also in good supply following last year's record-large production.

The 1993 food price outlook, developed before the flood, is for a modest 2- to 3-percent rise in the CPI for food. This range will be sufficient to include the minimal impact of flooding along the Mississippi River.

Slight Disruption Of Grain Exports

Flood conditions on the Mississippi River, which had limited commercial navigation from Cape Girardeau, Missouri to St. Paul, Minnesota by mid-July and reduced grain shipments into the Gulf, were not expected to significantly reduce the volume of U.S. grain exports. Although the Mississippi River and Eastern Gulf ports are the major export points for U.S. grain and oilseed exports (primarily corn and soybeans)—accounting for 60-70 percent of total exports—exporters rerouted some shipments to Pacific Northwest ports (PNW). Also, the estimated export volume for grains during July and August was down from the previous year, which helped mitigate the effects of reduced transportation alternatives.

The major customers for corn in July and August, Japan and Taiwan, together receive about one-third of their U.S. corn imports from the PNW ports in a normal year. The Japan shipments were shifted from the Gulf to the PNW after water routes were closed, and the Taiwan shipments were also expected to have that flexibility in rerouting exports based on past patterns.

While rail shipments to PNW ports are more costly than barge movements to the Gulf, ocean freight rates from PNW to Japan are about 50 percent lower than from New Orleans, so the two routes are competitive. Mexico is expected to be the major destination for U.S. soybean exports in August, and most of those shipments normally go overland by rail.

Barge capacity is adequate to make up for delays in shipments once the flood subsides. Barges can handle more than 1.4 million tons of grain per week through the Mississippi River and Eastern Gulf ports, about twice as much as they usually transport.

adverse conditions. With supplies expected down by more than total use, lower ending stocks and higher prices are expected for the 1993/94 season.

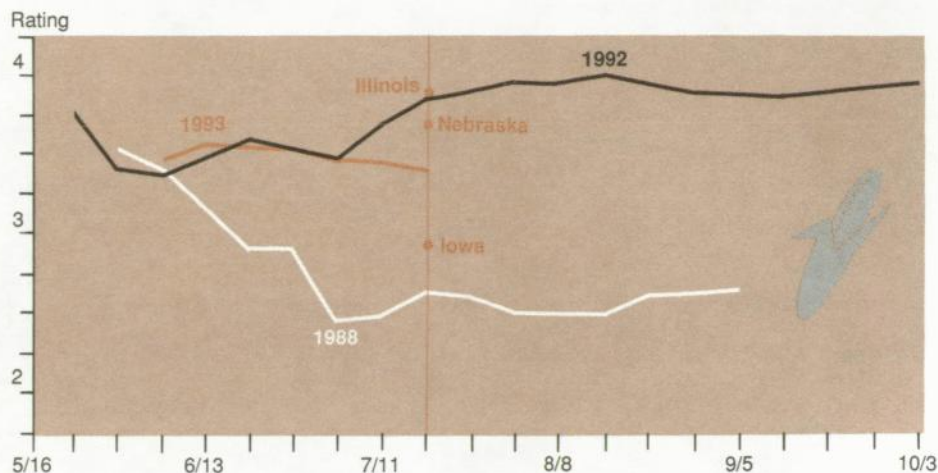
- Soybean production in 1993 is projected at just under 2 billion bushels, down 3 percent from the June projection, and down 10 percent from last year.
- While harvested area is expected down slightly from last year, the average yield is projected at 34.1 bushels per acre, down 1 bushel from last month and 3.5 bushels below last year.
- Total use, at 2 billion bushels, is expected down more than 6 percent in 1993/94, due mainly to a 12-percent decline in exports. Strong competition from the South American crop is expected.
- Lower ending stocks—projected down 22 percent from carryin—are expected to boost prices in 1993/94. Prices for the season are expected in the range of \$5.75-\$7 per bushel, compared with this year's \$5.50.

Crop ratings as of July 18 were relatively high in the eastern Corn Belt, and low in the western Corn Belt and the Southeast. In the western Corn Belt, crop development was behind normal due to cool weather and abundant moisture.

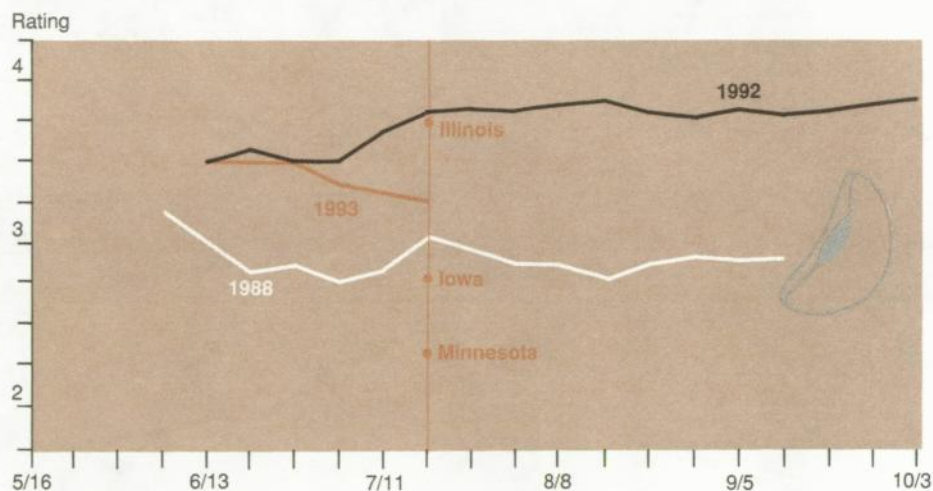
- Across the U.S., 42 percent of the soybean crop was rated good or excellent as of July 18, 42 percent rated fair, and 16 percent rated poor or very poor. Illinois, Indiana, and Ohio were in the best shape among the major producers; Minnesota, Iowa, and parts of the Southeast were in the poorest condition.
- Soybean development was reported well behind normal as of July 18, with blooming at 23 percent nationally, behind the 44-percent average. In Minnesota, 9 percent of the crop was blooming, compared with a 5-year average of 52 percent.

Corn and Soybean Crop Ratings Have Fallen Since Mid-June

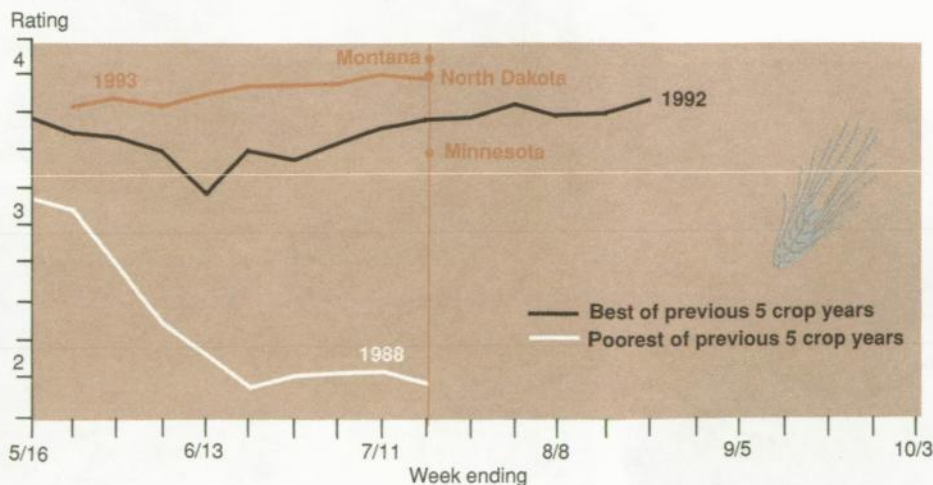
Corn



Soybeans



Spring Wheat

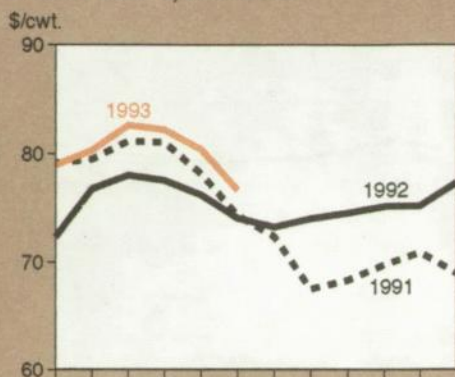


1 = Very poor; 2 = Poor; 3 = Fair; 4 = Good; 5 = Excellent.

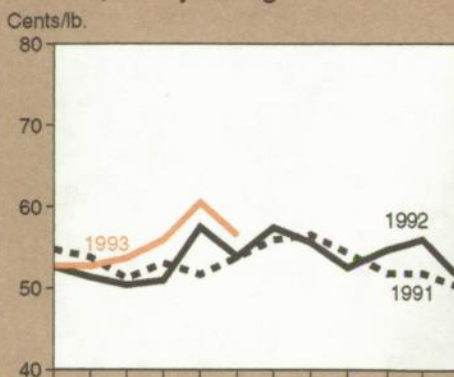
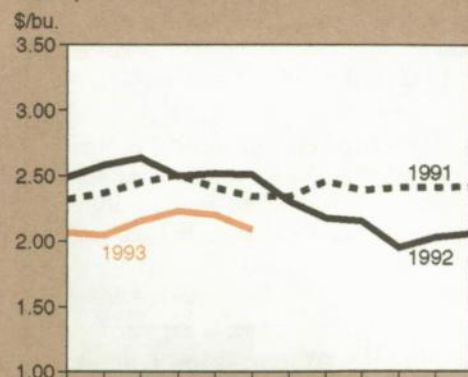
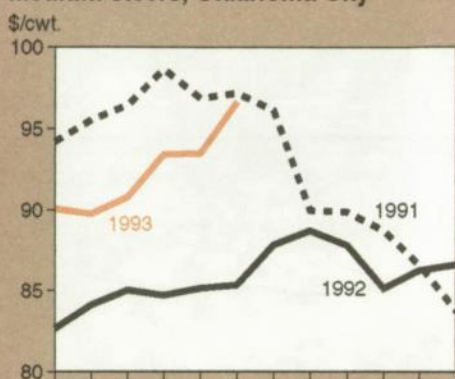
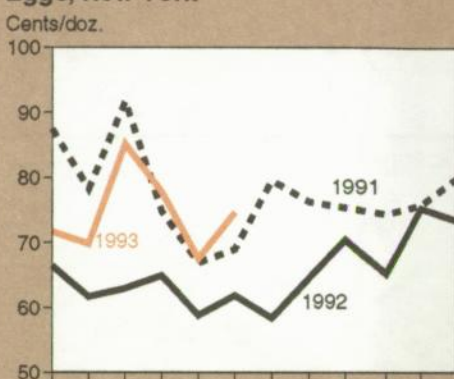
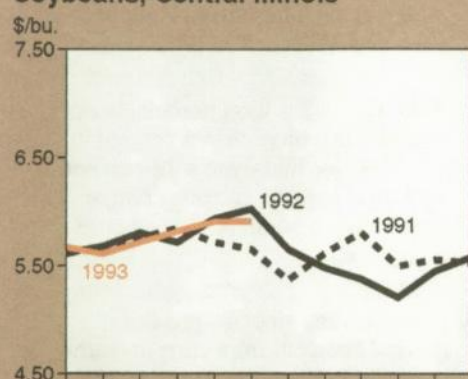
Agricultural Economy

Commodity Market Prices

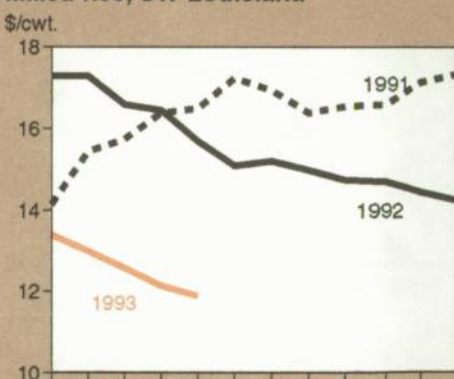
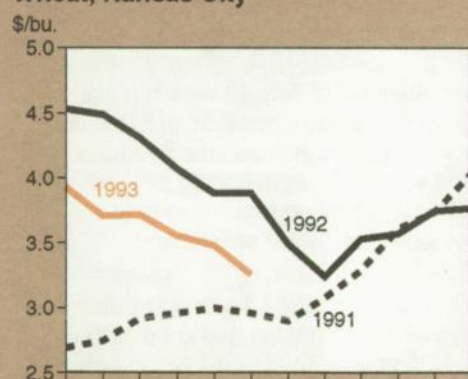
Choice steers, Nebraska



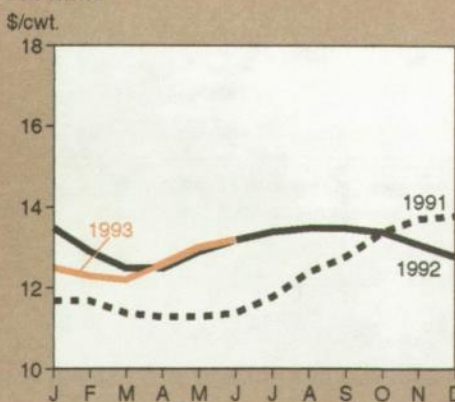
Broilers, 12-city average

Corn, Central Illinois¹Medium steers, Oklahoma City²Eggs, New York³Soybeans, Central Illinois⁴

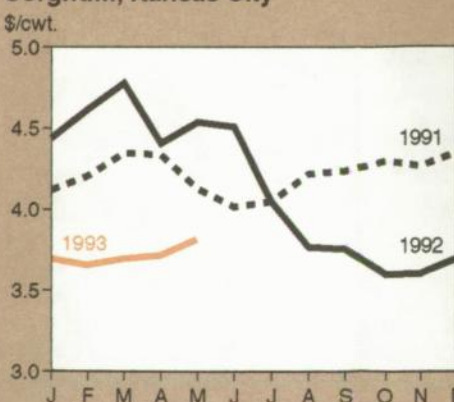
Barrows and gilts, 6 markets, Omaha

Milled rice, SW Louisiana⁵Wheat, Kansas City⁶

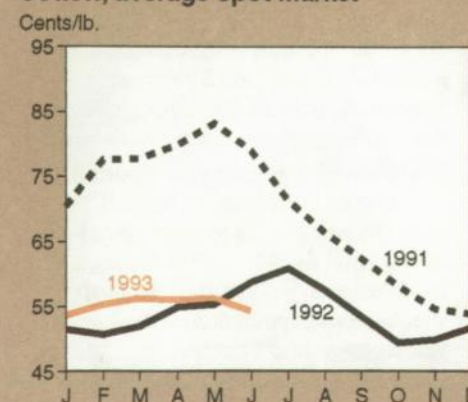
All Milk



Sorghum, Kansas City



Cotton, average spot market



¹No. 2 yellow. ²600-700 lbs. medium no.2. ³Grade A large. ⁴No. 1 yellow. ⁵U.S. No.2 long-grain. ⁶No. 1 HRW.

Record Yield Expected for Wheat

The 1993 U.S. wheat crop is expected to be the fourth largest on record, fueled by a record national average yield. With this large crop on the horizon, and total use in 1993/94 expected nearly unchanged, projected ending stocks are up markedly and prices are expected down.

- Total wheat production is forecast at 2.6 billion bushels, up 6 percent from last year's crop and up 3 percent from the June projection. Harvested area is expected up 1.8 million acres from last year, while the national average yield, at 40.5 bushels per acre, exceeds the previous record of 39.5 bushels set in 1990.
- Total use is projected at 2.46 billion bushels, basically unchanged from last year. Lower exports are expected to be largely offset by higher feed and residual disappearance.
- Projected ending stocks, at 741 million bushels, are up 40 percent from the carryin level, prompting a decline in U.S. farm prices. The season-average price in 1993/94 is expected in the range of \$2.45-\$2.85 per bushel, compared with \$3.24 estimated for 1992/93.

The national average wheat yield is expected to set a record, although no individual class is forecast to reach a record yield.

- The average winter wheat yield, based on July 1 conditions, is forecast at 41 bushels per acre, down 0.2 bushel from the June 1 forecast. This yield would be second only to the record-high 41.8 bushels realized in 1983.
- The average "other spring" yield is forecast at 39.4 bushels per acre, while the durum yield is forecast at 37.8 bushels. Both would be second only to last year's records.

Rice Prices To Be Down in 1993

Expected 1993 rice output is projected down from last month's projection due to lower planted area, and is down from last season. With supplies expected lower than in 1992/93, and with a slight increase in use, ending stocks in 1993/94 are projected to tighten substantially from the carryin level. Even with tighter ending stocks, low world prices are expected to weigh on the U.S. price outlook.

- Rice production in 1993, at 168 million cwt, is projected down 6 percent from last season, and down 3 percent from last month's projection. Supplies are expected down 1 percent from last season.
- Total rice use is expected up 2 percent in 1993/94, with increases projected for both domestic use and exports.
- With total use up, and a drop in supplies, ending stocks are expected down nearly 17 percent. The season-average price is forecast in the range of \$4.50-\$6 per cwt, down from the \$5.90-\$6 expected for this year.

Nationally, 64 percent of the rice crop rated in good condition as of July 18, with 36 percent rated fair. The best conditions were reported in Arkansas and California; Louisiana and Mississippi were mainly in the fair range.

Cotton Stocks Revised Upward

U.S. cotton output in 1993 was revised upward in July, reflecting larger planted area as reported in the June *Acreage* report. If realized, 1993 cotton output would reach the highest level since 1937. With supplies outweighing the projected increase in total use, ending stocks for 1993/94 are expected up sharply from 1992/93.

- Cotton production in 1993, projected at 17.8 million bales, is up nearly 10 percent from the 1992 level, and up 2 percent from June's projection.
- Domestic use and exports in 1993/94 are both expected above the current year's levels, and are unchanged from the June projection.
- The increase in use expected in 1993/94 is not enough to offset the rise in supplies. Ending stocks are projected up 26 percent from 1992/93, and the stocks-to-use ratio is expected to reach 35 percent.

Nationally, 92 percent of the cotton crop rated good to fair as of July 18. California, Arizona, and Oklahoma reported the most favorable ratings, while conditions were poorest in the Carolinas, Georgia, and parts of the Mississippi Delta.

[Joy Harwood (202) 219-0840]

Global Market: Outlook for 1993/94

This issue presents USDA's first detailed projections for 1993/94 oilseeds, cotton, and rice. In addition, trade for all commodities starting from 1987/88, has now been inflated by inclusion of trade between the countries of the former Soviet Union (FSU). Rice trade for the first time excludes intra-EC trade (already the case for other grains); oilseeds and cotton, however, still include intra-EC trade.

Soybean Output Drops, Other Oilseeds Expand

Assumed normal yields place 1993/94 projections of world soybean production below the record 1992/93 output, but raise cottonseed and sunflowerseed from weather-induced declines. A projected record Canadian rapeseed crop offsets a sharp drop in China's rapeseed, putting world rapeseed output up slightly.

Agricultural Economy

The U.S. accounts for most of the drop in soybean production. A second consecutive large crop is projected for South America this year. Area planted in Brazil is likely to increase because of higher soybean prices, but Brazil's production is projected down as yields return to normal. Record soybean output is projected for Argentina as it rebounds from flooding at harvest this season.

With competition up and slow demand growth, U.S. soybean and soybean meal exports are expected to fall. Two years of large South American outturn, coupled with a strong recovery for other oilseeds, strengthens competition. Slow growth in global use of soybeans and soybean meal is also likely to enhance competition. Lower EC imports, and a continued low level of imports by Eastern Europe and the FSU, offset rising imports in Asia, Latin America, and the Middle East.

- Global soybean production is placed at 112.6 million tons, down nearly 4 percent.
- Projected sunflowerseed production rebounds to 23.6 million tons, up 10 percent; cottonseed is projected up 7 percent to 33.6 million and rapeseed is 26.5 million, a 2-percent gain.
- Soybean production in Brazil and Argentina is forecast at 22 and 12 million tons, respectively, compared with 22.3 and 11.2 million in 1992/93.
- Brazil's soybean exports are projected up 8 percent to 4.8 million tons, and soybean meal exports rise to 9 million, a 6-percent gain. Argentina is forecast to export 3.3 mil-

lion tons of soybeans, up 10 percent, and 6.3 million of soybean meal, up more than 2 percent.

- At a projected record 5 million tons, Canadian rapeseed output recovers from the 3.7 million estimated for 1992/93, and exports rise 19 percent to 2.2 million tons.
- Projected global soybean imports fall 2 percent, while soybean meal imports drop 3 percent.
- U.S. soybean exports drop 12.2 percent to a projected 18.5 million tons, and soybean meal exports are projected down 8.4 percent to 5.4 million. U.S. market share declines to 62 percent for soybeans and 19 percent for soybean meal.

Cotton Competition Strong, But U.S. Exports Up

Global cotton production is projected to rise in 1993/94 as Pakistan recovers from flooding, and yields improve in Uzbekistan and Turkmenistan. Assuming stronger world economic growth, global cotton import demand and U.S. cotton exports also rise. But large competitor crops keep cotton export competition vigorous.

- World cotton production is projected to rise 4 percent.
- Pakistan's crop recovers to 8.7 million bales from only 7.1 million in 1992/93.
- Uzbekistan's and Turkmenistan's anticipated outturns are 6.2 and 1.83 million bales, compared with this season's 6 and 1.79 million.
- On much-reduced area, but with more normal yields, China's output is projected at 20 million bales, just under its 20.7-million-bale 1992/93 crop.

Soybean Trade Dips, Cotton Projected Up

	Year ¹	Production	Exports ²	Consumption ³	Carryover
<i>Million tons</i>					
Wheat	1992/93	558.4	108.0	553.1	130.8
	1993/94	556.5	104.1	559.1	128.3
Corn	1992/93	526.5	61.7	503.2	102.8
	1993/94	486.0	55.6	509.5	79.3
Barley	1992/93	165.0	17.0	165.1	31.0
	1993/94	166.6	17.4	167.9	29.7
Rice	1992/93	350.4	13.5	352.9	53.4
	1993/94	348.6	13.6	356.1	44.9
Oilseeds	1992/93	227.3	38.8	184.9	22.1
	1993/94	228.0	37.5	189.0	20.3
Soybeans	1992/93	116.9	31.3	96.2	19.5
	1993/94	112.6	29.7	97.3	16.8
Soybean meal	1992/93	76.0	28.1	75.0	3.3
	1993/94	77.1	27.9	75.5	3.4
Soybean oil	1992/93	17.1	4.3	17.2	1.9
	1993/94	17.7	4.3	17.5	1.8
<i>Million bales</i>					
Cotton	1992/93	82.5	25.4	85.5	37.8
	1993/94	85.7	27.2	87.5	35.7

¹ Marketing years are: wheat, July-June; coarse grains, October-September; oilseeds, soybeans, meal, and oil, local marketing years except Brazil and Argentina adjusted to October-September trade; cotton, August-July. ² Rice trade is for the second calendar year. All trade now has been inflated to include trade among the countries of the former Soviet Union. In addition, for the first time, rice trade, like other grain trade, excludes intra-EC trade. Oilseed and cotton trade, however, still include intra-EC trade. ³ Crush only for soybeans and oilseeds.

- With global trade projected up 7 percent, U.S. exports are expected to rise 1 million bales to 6.3 million.
- Exports from Uzbekistan, with prices likely remaining the world's lowest, are projected up 8 percent to 5.85 million bales.
- Pakistan's exports are expected to increase 15 percent to 1.5 million bales.

Rice Output Drop in China Pulls Down World Tally

World rice production in 1993/94 is projected to drop, but most of the decline is in China where producers will shift out of uncompetitive lower quality rice. Production of other competitors and of major importers is anticipated up. Low prices continue as imports stagnate, reflecting importers' rising supplies. With output up among major export competitors—Thailand, Burma, and Pakistan—competition with U.S. exports remains strong.

- Global rice outturn is projected down just half a percent.
- China's output is forecast to drop more than 6 million tons to 124 million.
- Production in the rest of the world rises from 220 to nearly 225 million; 2 million tons of this gain is in India where output is projected up to 74 million tons.
- Thailand's output is projected at 13.2 million tons, Burma's at 8.5 million, and Pakistan's at 3.2 million.
- Calendar-year 1994 trade is projected at 13.6 million tons, compared with 13.5 million in 1993.
- U.S. exports are expected to rise 100,000 tons to 2.5 million.

- Thailand's and Vietnam's exports rise 5 percent each to 4.2 and 2 million tons; Burma's increase to 500,000, up two-thirds; Pakistan's reach 1.2 million, a one-third gain; and India's rise 11 percent to 500,000.

Lower FSU Imports Of Wheat & Corn

Favorable 1993/94 weather in the FSU is leading to higher-than-anticipated winter grain yields and spring grain area, raising projected production. Use in the FSU continues to fall as livestock herds shrink. And financial constraints still limit the FSU's ability to import.

World 1993/94 wheat and coarse grain trade is projected down from 1992/93, more than anticipated earlier. With lower imports, wheat export competition is likely to strengthen from previous expectations, and corn competition remains relatively high. U.S. exports of wheat and corn are projected down further.

- FSU grain production is projected at 184 million tons, up slightly. Grain imports drop to 20.7 million of wheat and 6 million of corn.
- Projected global wheat and corn imports fall 3.6 and 9.9 percent.
- U.S. wheat and corn exports are expected to fall 13.5 and 11.5 percent to 32 and 38.5 million tons.

[Carol Whitton (202) 219-0824]

For further information, contact:

Sara Schwartz, world wheat; Randy Schnepf, world rice; Edward Allen, domestic wheat; Janet Livezey, domestic rice; Pete Riley, world feed grains; Tom Tice and Jim Cole, domestic feed grains; Nancy Morgan and Jaime Castaneda, world oilseeds; Scott Sanford and George Douvelis, domestic oilseeds; Ken Bowman, world cotton; Bob Skinner and Les Meyer, domestic cotton. World information (202) 219-0820; domestic (202) 219-0840. **AG**

Livestock, Dairy & Poultry Overview

Wholesale prices for beef, already sharply lower, are expected to push down retail prices in the summer quarter. Beef supplies have increased seasonally and are expected to remain large into August. Hog producers are scaling back breeding herds despite favorable returns during the first half of 1993, and pork production is expected to increase later this year and early in 1994.

Wholesale prices for broilers are about steady and eggs are above a year ago, despite increased output. Turkey prices are steady to higher, with only slight increases in production. Poultry meats face stiff competition from increasing supplies of red meat, but record exports of poultry meat are expected in 1993.

Beef Prices To Drop

Retail beef prices are expected to decline sharply in the third quarter, as retailers respond to lower wholesale prices and seasonally larger supplies. Wholesale prices have dropped since May as fed cattle slaughter increased and beef demand weakened seasonally. Steer and heifer slaughter were up sharply in June, and are expected to remain above a year earlier during July and August. Seasonally declining fed cattle slaughter in late summer will be offset by increased cow and bull slaughter, and both fed and nonfed cattle slaughter are expected to average above year-earlier levels for the rest of 1993.

- Wholesale beef prices dropped over \$15 per cwt by mid-July from their peak in May, trading below \$115, down from nearly \$130 during the first half of May. Prices for chucks and rounds from fed cattle have

Agricultural Economy

declined to where they are competitive with imported beef and cows slaughtered for processed beef.

- Retail Choice beef prices are expected to drop 10 cents or more per pound in the summer quarter from a record-high \$3.04 per pound reached in May. Prices in June dropped 6 cents a pound to \$2.98.
- August prices for finished cattle are expected to dip to the low \$70's per cwt.

Cattle-on-feed inventories are higher than last year and are expected to exceed 1992 levels for the remainder of the summer despite larger marketings. Feeder cattle prices are up because of strong demand for and tight supply of stockers. The recent increase in grain prices has not diminished bidding for feeder cattle, suggesting that many of these cattle will continue to be kept on grass for additional weight gain.

- June 1 cattle-on-feed inventories in the seven monthly reporting states were 7 percent above a year earlier.

- Feedlot placements during May were 4 percent higher than a year earlier, and are expected to exceed year-earlier levels in June as well.
- Feedlots are purchasing heavier stocker cattle for as much as \$90 per cwt, which could result in losses if prices for fed cattle do not increase into the upper \$70's this fall.

Pork Output Up Slightly In Third Quarter

Despite favorable returns during the first half of 1993, hog producers are scaling back the breeding herd. Hog prices were up in June, but declined in July and will decline further when slaughter rates rise seasonally later in the summer. Retail prices, which have increased since May when they were at the lowest level since 1989, are expected to hold steady in second-half 1993.

- The breeding herd on June 1 was 2 percent lower than a year ago. Producers indicated intentions to have slightly more sows farrow during

June-November than last year. If the intentions are realized, pork production during first-half 1994 is expected to be 4-5 percent higher than in the first half of 1993.

- The inventory of market hogs on June 1 was up 1 percent from last year, suggesting that slaughter in the second half of 1993 will be up slightly. Third-quarter slaughter is likely to be up 1 percent above last year, and fourth-quarter slaughter is likely to be about the same.
- Hog prices averaged about \$49 per cwt in June, but are expected to decline to the low \$40's per cwt in the fall, as output increases. In first-half 1994, hog prices are expected to be in the low- to mid-\$40's if increased production is realized.
- Retail pork prices rose in June to \$1.97 per pound and are expected to average around \$2 per pound in second-half 1993.

U.S. Livestock and Poultry Products—Market Outlook at a Glance

		Beginning stocks	Production	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price
								Total	Per capita	
		----- Million lbs. -----						----- Lbs. -----		\$/cwt
Beef	1992	419	23,086	2,440	25,945	1,324	360	24,261	66.5	75.36
	1993F	360	23,126	2,335	25,821	1,300	350	24,171	65.6	75-79
Pork	1992	388	17,234	645	18,267	407	385	17,475	53.1	43.03
	1993F	385	17,356	680	18,421	410	385	17,626	53.0	43-47
----- ¢/lb -----										
Broilers	1992	36	20,907	0	20,943	1,489	33	19,421	66.8	52.6
	1993F	33	21,912	0	21,945	1,630	33	20,282	69.1	52-56
Turkeys	1992	264	4,778	0	5,042	171	272	4,599	18.0	60.2
	1993F	272	4,848	0	5,119	187	260	4,672	18.1	58-62
		----- Million doz. -----						----- No. -----		¢/doz.
Eggs*	1992	13.0	5,882.7	4.3	5,899.9	157.0	13.5	5,002.8	235.1	65.4
	1993F	13.5	5,917.9	5.0	5,936.4	154.0	12.0	5,013.1	233.1	73-77

Based on July 12, 1993 World Agricultural Supply and Demand Estimates.

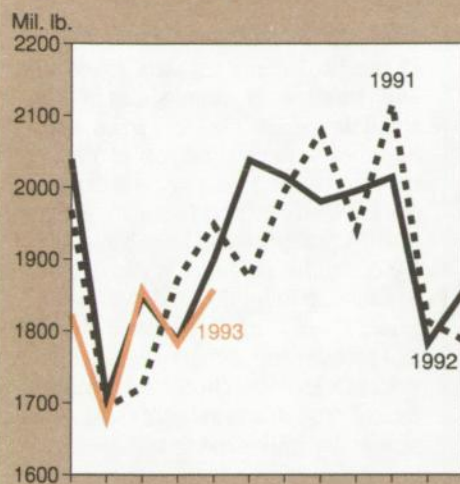
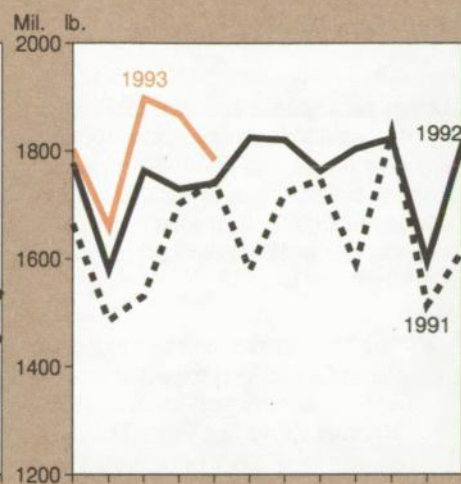
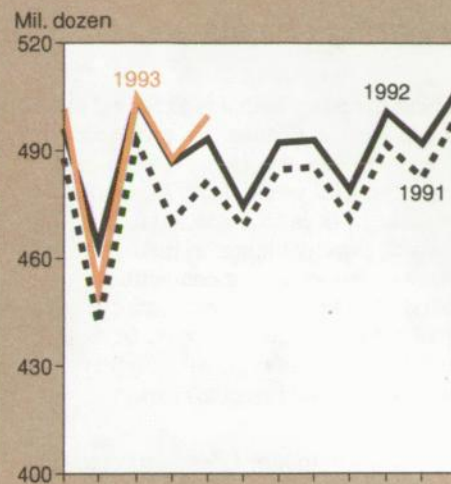
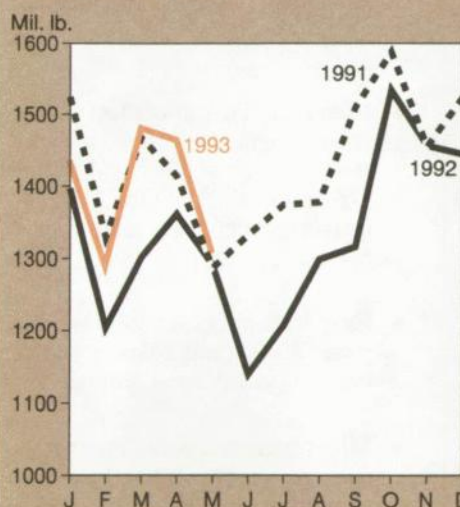
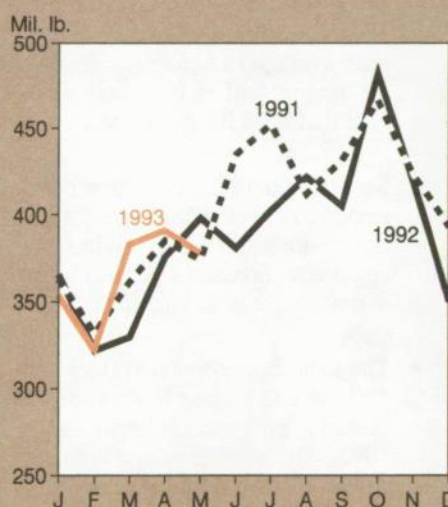
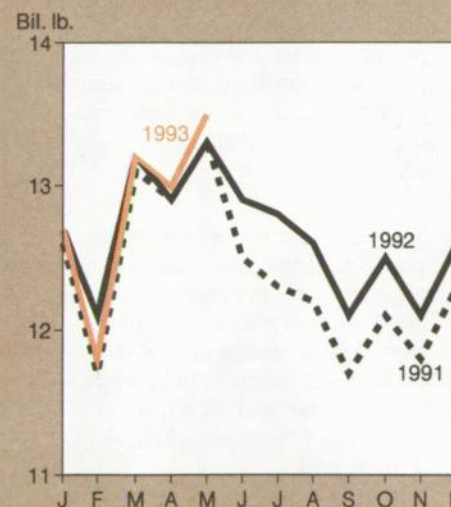
*Total consumption does not include eggs used for hatching.

F = Forecast.

See tables 10 and 11 for complete definition of terms.

Livestock & Product Output

Agricultural Economy

Commercial beef**Broilers¹****Eggs****Commercial pork****Turkeys¹****Milk**

¹Federal inspection production, ready-to-cook.

Broiler Growth Continues Strong

Broiler output, at record levels for the 20th consecutive year, is expected to increase during the rest of 1993, as prices and net returns remained strong in July. Broiler prices are expected to continue at about year-earlier levels despite higher output. Heavier birds are being produced because of increased demand for processed products.

- Broiler production in the third quarter and for 1993 overall is expected to be up 5 percent from a year earlier. Fourth-quarter increases of 4

percent are expected. On a whole-bird basis, average net returns for the first half of 1993 were double those of last year.

- Numbers of broiler chicks hatched April through June averaged more than 4 percent above a year ago, and slaughter weights are averaging 1-2 percent above a year earlier.
- The broiler hatching-egg flock on June 1, an indication of production in August and September, was more than 2 percent above a year earlier.

- Third-quarter wholesale prices for whole birds are expected to hold about steady to slightly above last year, in the mid-50's per pound. The annual average wholesale price for 1993 is expected to be around 54 cents, up from 52.6 cents in 1992.
- Retail prices are expected to remain stable for the rest of the year, averaging 87-88 cents per pound, only slightly above last year.

Agricultural Economy

Slow Growth In Turkey Output

Growth in turkey output is expected to slow in 1993, reflecting low producer prices in 1992 and poor net returns over the past several years. In 1993, wholesale turkey prices are expected to be steady to slightly higher, as turkey meat continues to face strong competition from declining pork prices. Turkey prices are getting some support from moderate production growth, slightly lower stocks, and increased exports.

- Turkey output in 1993 is expected to be only 1-2 percent higher than 1992 production, which was up 3.8 percent from 1991. Third-quarter production is expected to be up 1-2 percent from a year earlier. Poult placements for third-quarter slaughter averaged about 1 percent less than last year, but slaughter weights are heavier.
- Wholesale prices for hens are expected to strengthen seasonally to about 60 cents per pound in the third quarter. Tom prices, benefiting from further processing demand for breast meat, continue to be higher than last year, and are expected to reach 65-68 cents per pound in the third quarter.
- On June 1, turkey stocks totaled 476 million pounds, 2 percent less than last year's record. Whole-bird stocks, at 334 million pounds, were 3 percent below a year earlier.
- Exports of turkey meat during the first 5 months of 1993 were up about 23 percent compared with a year earlier. Nearly all growth was in sales to Mexico, whose share grew from 59 to 66 percent. Further export gains will depend on expanding exports to other markets.

Egg Returns To Remain Attractive

Lower per capita supplies of table eggs are expected to keep egg prices above last year for the rest of 1993. Prices are holding net returns at levels that are encouraging slightly increased production. Egg exports in 1993 are expected to be slightly lower in 1992.

- The New York wholesale egg price (large Grade A) is expected to average 73-76 cents per dozen in 1993, 10 cents above last year. The third-quarter New York price is also expected to be in the mid-70's and 10 cents above last year.
- Net returns at the wholesale level have averaged 12 cents per dozen for the first half of 1993, and will be near that level for the entire year.
- Second-half 1993 production is expected to increase 1 percent for all eggs, with a small increase in table-egg production and 4 percent growth in hatching-egg production.
- The table-egg production flock in 1993, at 233 million birds, is expected to be 1 percent larger than 1992. The number of egg-type chicks hatched during January through May was 2 percent larger than last year. These pullets will enter the production flock this summer, replacing aging flocks as well as keeping flock size larger than last year.
- Egg exports in 1993 will be 150-158 million dozen, shell-egg equivalent, near the 1992 level. Table-egg exports to Hong Kong and the Middle East are above last year. Egg product exports to Japan were down in early 1993.

Milk Prices Decline

Domestic demand for skim solids milk will determine if recent slides in milk and dairy product prices can be stopped. Supplies in the second half of 1993 are expected to be moderate, and exports under the Dairy Export Incentive Program (DEIP) probably will be substantial. If the economic recovery is strong enough to shore up dairy demand, wholesale prices should stabilize through summer and recover somewhat in autumn. For prices to recover, cheese sales need steady growth and sales of fluid milk and nonfat dry milk need to stabilize.

- Prices of Cheddar cheese on the National Cheese Exchange fell 13-14 cents per pound during the first 3 weeks of June.
- Nonfat dry milk prices lost about 5 cents, moving to the lowest level since the start of 1992, and eliminating the increase after the April announcement of DEIP sales to Mexico.
- Farm milk prices for 1993 are projected 40-60 cents below a year earlier, a 3- to 4-percent decline.
- Milk production is projected to decrease slightly during July-September from last year and to be near 1992 levels in the last quarter.

For further information, contact: Richard Stillman and Agnes Perez, coordinators; Steve Reed, cattle; Leland Southard, hogs; Lee Christensen, Larry Witucki, and Milton Madison, poultry; Jim Miller and Sara Short, dairy. All are at (202) 219-1285. **AO**

Specialty Crops Overview

Strong grower prices for the 1992 crop of potatoes in the spring of 1993, weak prices for alternative commodities, improved contract returns, and a more favorable water situation in the West have contributed to increased acreage of potatoes in fall 1993. Acreage of fresh-market vegetables is also expected to increase this year, though fresh tomato, sweet corn, and lettuce acreages are expected to decline.

The outlook for the fall 1993 apple crop indicates another record U.S. crop but reduced production in the western U.S. The large apple crop dampens prospects for higher grower prices for the 1993/94 marketing year.

Fall Potato Acreage Up

USDA forecasts an increase in 1993 fall potato acreage, with most of the increase occurring in the western states. The fall crop accounts for about 88 percent of U.S. production and provides potatoes for fresh and processing use into the following summer. Among the factors behind the expanded potato acreage are higher open-market potato prices this spring, lackluster prices for alternative commodities, improved contract returns on processing potatoes in some states, and a more favorable water situation in the West.

With wet and cold weather delaying plantings, yields in 1993 may be reduced slightly from last season's record level. The first estimate of U.S. fall potato production will be released in early November.

- U.S. fall potato acreage is forecast at 1.19 million acres, up 4 percent from a year earlier.

- Potato acreage in the western states is forecast up 7 percent, with the largest increase—16 percent—in Washington, the second leading potato growing state, behind Idaho. Washington, which processes most of its crop into frozen french fries, had reduced acreage 13 percent in 1992. Acreage is up 3 percent in Idaho.
- In the central states, potato acreage is up 1 percent, although North Dakota, the leading U.S. producer of potatoes for chips, planted 2 percent less area than in 1992. Growers in North Dakota produced the two largest crops in the state's history the past two seasons.
- Acreage in the eastern states is expected to rise by 1 percent, with growers in Maine planting the same as in 1992. Growers in Maine and elsewhere in the East suffered heavy storage losses during the 1992 marketing year.
- Potato prices in the first quarter of 1993 were up 32 percent from a year earlier.
- Canadian growers (especially in eastern Canada) planted only slightly fewer potatoes for harvest in the fall of 1993. A large Canadian crop would likely boost U.S. fresh potato imports during the 1993/94 marketing season. Traditionally, U.S. east coast cities have provided ready markets for Canadian round white potatoes.

Fresh Vegetable Acreage Increases

Fresh-market vegetable acreage for summer 1993 harvest is expected to increase from 1992 due to larger area for snap beans, broccoli, cabbage, carrots, and cucumbers. Fresh tomato acreage is expected to drop from last summer's low levels because of reduced acreage in California, which accounts for over 60 per-

cent of summer tomato acreage. Acreages of sweet corn, melons, lettuce, and celery are also forecast to decline.

- The area of 12 major fresh-market vegetables for harvest this summer (largely July-September) is estimated 3 percent higher than in summer 1992 despite reduced acreage of the leading commodities (lettuce, tomatoes, and corn). While most states produce vegetables and melons in the summer, about 40 percent of summer vegetable and melon acreage is in California.
- Acreage of fresh tomatoes is estimated to be down 2 percent, with California dropping 3 percent and New Jersey 4 percent. Grower prices for fresh tomatoes have been unstable this year because of cool, wet weather.
- Acreage for the three leading melons—watermelon, cantaloupe, and honeydews—is down 4 percent due largely to cool, wet weather during watermelon planting. Georgia, Texas, and South Carolina are the leading states for summer watermelons. Watermelon acreage is off 10 percent, while cantaloupes are up 3 percent and honeydew area is up 2 percent.
- Sweet corn acreage is estimated to be down 1 percent. Cool, wet weather hindered planting in New York, Pennsylvania, Michigan, and California which account for the nation's largest share of summer sweet corn acreage.
- Lettuce and celery acreage are estimated down 3 and 2 percent, while acreage of bell peppers, cauliflower, and broccoli are expected 4, 5, and 18 percent higher. Broccoli acreage reflects higher average prices over the past year.

Agricultural Economy

Potato Acreage: How the West Won the Edge

July 1993 estimates of planted acreage of potatoes indicate a much larger increase in the West than in the East, a pattern that reflects a continuing shift of potato growing to the West since the 1950's. The Mountain and Pacific coast states are expected to account for nearly 55 percent of U.S. harvested potato acreage in 1993, while the Central region, the Northeast, and the South are expected to account for 28, 10, and 7 percent.

The West has not always been the major potato growing area. In 1950, the Northeast accounted for 23 percent, and the Central region and the South, 30 and 21 percent of U.S. acreage.

The development of irrigated land, growth of the potato processing industry, the rise of the Russet Burbank variety, and vigorous marketing of western-grown fresh potatoes have combined to shift potato growing from the South and East to the West.

Since its founding in 1902, the U.S. Bureau of Reclamation policy of developing arid lands for agricultural production created several million acres of irrigated cropland in the West, which was well suited to potato growing. Producers growing potatoes on irrigated land tended to obtain higher yields, which lowered production costs. Federal water pricing policies that subsidized producers' water costs also helped lower production expenses. Virtually all potatoes in Idaho, Washington, Oregon, and Colorado are grown on irrigated land, part of which is irrigated with water from government-developed projects.

A second factor behind the westward movement of potato production was a growing consumer preference for processed over fresh potatoes. Advances in processing resulted in superior frozen potato products, especially frozen french fries. Economic and social changes in the U.S., such as higher incomes and an increase in women entering the work force, resulted in a shift in demand from fresh potatoes to the convenience of processed potato products. The processing industry demanded potatoes with a uniformly high proportion of solids to water, such as the Russet Burbank variety grown on irrigated land.

In addition, western-grown potatoes have captured market share of fresh potato consumption from eastern-grown round white potatoes. Idaho, the largest potato producer, was successful in promoting its fresh potatoes, despite a general shift in potato demand from fresh to processed. "Grown in Idaho" is perceived by many consumers as a mark of a superior quality baking potato. Idaho remains the largest shipper of fresh potatoes, and other western states such as Colorado are pursuing its marketing strategy.

Improved storage over the last 45 years has extended the marketing season for western potatoes. At one time, "new" potatoes, usually grown in the East and South, were preferred over stored potatoes because of their superior quality. Improved storage facilities, however, allowed for marketing high-quality Russet Burbank potatoes during the spring and summer of the following year, which helped western producers to penetrate eastern markets late in the marketing season.

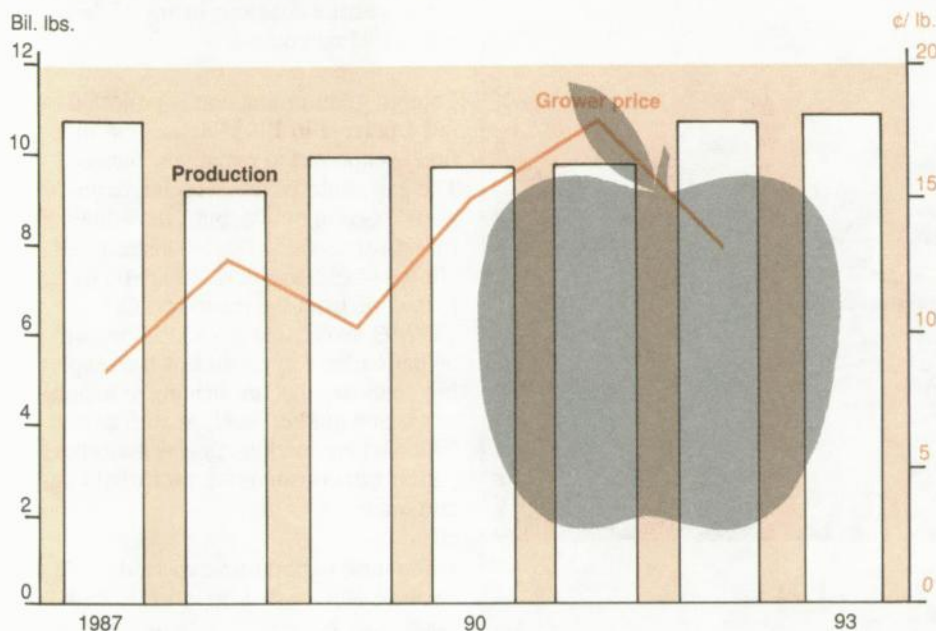
[Charles Plummer (202) 219-0883]

More Than Half of U.S. Potato Acreage Is in Western States

Region	1950	1960	1970	1980	1990	1993
<i>Percent of U.S. acreage</i>						
West	26.4	35.5	44.8	48.4	54.8	54.8
Central	29.8	27.0	24.9	26.8	27.1	27.8
Northeast	23.3	22.8	19.5	16.3	9.9	10.0
South	20.5	14.7	10.8	8.5	8.2	7.4
<i>1,000 harvested acres</i>						
U.S.	1,697.9	1,386.8	1,421.6	1,148.3	1,370.6	1,355.3

1993 forecast. West: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, and Alaska (1960-80).

Last Year's Large Apple Crop Pushed Down Prices



1993 forecast. Annual average grower price.

Apple Output May Reach Record in 1993

A potential record apple crop in 1993 may dampen any recovery of prices in the 1993/94 marketing season. The apple bloom in Washington was spotty and the Golden Delicious and Red Delicious prospects are less favorable than last year. But Fuji, Gala, and Granny Smith output is expected higher. The smaller western crop may prop up fresh apple prices next spring and summer since most late-season fresh apples are produced in the West.

- Apple output is forecast at 10.8 billion pounds, up 1 percent from the 1992 record-large crop. Output in Washington is forecast down 2 percent, while output in the eastern states is forecast up 3 percent. Production in Michigan is forecast up nearly 2 percent.
- The grower price for all sales in 1992/93 averaged about 13.4 cents a pound, down from 17.9 cents in 1991/92.

Fall/winter pear production prospects (excluding Bartlett) are higher than in 1992, while grape production is lower.

- U.S. fall/winter pear production is forecast up 10 percent. Production was unchanged in California, and higher in Oregon and Washington.
- Production of Bartlett pears, used mostly for canning, is off 2 percent from 1992.
- California all-grape production is forecast 7 percent lower than in 1992. Production is expected slightly higher for wine-type grapes, but lower for raisin and table types.

Sugar Marketing Allotments Announced

On June 30, 1993, USDA announced the establishment of marketing allotments for domestically produced sugar and crystalline fructose for fiscal 1993. The action, which restricts the amount of sugar that U.S. growers can market, is designed to strengthen producer prices for raw

sugar and refined beet sugar. The 1990 Farm Act provides that allotments be imposed when estimated sugar import needs fall below 1.25 million short tons, raw value, in a fiscal year. Because of increased domestic sugar production, projected import needs for fiscal 1993 fell below 1.25 million tons.

- The overall allotment quantity is 7,770 short tons, raw value, with 4,149 tons or 53.4 percent for beet sugar, and 3,621 tons or 46.6 percent for cane sugar.
- Refined beet sugar prices (Midwest markets) during January-June 1993 were about 3 cents a pound below a year earlier. Raw cane sugar prices were nearly unchanged from a year earlier. Since the marketing allotment announcement, raw cane sugar prices have risen about a half cent and refined beet sugar prices have risen about 2.5 cents.
- The sugar import quota for the 24-month period ending September 30, 1994 is 2.5 million short tons, raw value.

Flue-cured Tobacco Output Down

U.S. flue-cured tobacco production is expected lower in 1993 than last year because of slightly reduced harvested acreage and lower yields. But grower prices for the 1993/94 marketing season (July to June) are expected to be only slightly higher than the season before. Large world supplies and a shift by U.S. manufacturers to cheaper, imported leaf will dampen domestic demand. Even though price supports are higher, weakening demand will keep prices near last year's level.

- USDA forecasts 1993 flue-cured tobacco production 4 percent lower than in 1992, with harvested acreage expected to drop 0.5 percent.

Agricultural Economy

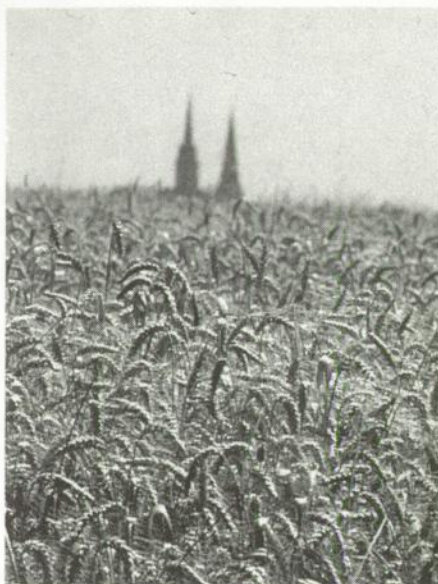
- Grower prices for flue-cured tobacco for the 1993/94 marketing season are expected to change little from last season. Flue-cured auction markets for the 1993 season opened July 21.
- World tobacco supplies in 1993/94 are expected to be up, and U.S. tobacco imports are expected to continue increasing.
- After falling 14 percent in 1991/92, total disappearance of flue-cured tobacco in the 1992/93 marketing year is forecast up about 8 percent from the year before.
- Burley tobacco disappearance for the 1992/93 marketing year (October-September) is expected to drop from last season. An expected further decline in disappearance for 1993/94, and larger October 1, 1994 carryover stocks, will result from substitution of imported for U.S.-grown tobacco.

[Glenn Zepp and Gary Lucier (202) 219-0883]

For further information, contact:

Dennis Shields and Diane Bertelsen, fruit and tree nuts; Gary Lucier, vegetables; Peter Buzzanell, sweeteners; Doyle Johnson, greenhouse/nursery; Verner Grise, tobacco (202) 219-0883. David Harvey, aquaculture; Lewrene Glaser, industrial crops (202) 219-0085. **AO**

Commodity Spotlight



European Community Delegation, Washington, D.C.

World Grain Trade To Shrink In 1993/94

As competition heats up for a smaller world wheat market, and demand for coarse grains continues to weaken, world grain trade in 1993/94 is likely to fall for the second year in a row. Structural changes in the former Soviet Union (FSU) and Eastern Europe are among the factors in the decline in global grain trade, and market reforms in China are adding an element of uncertainty to the forecasts.

World wheat and coarse grain trade is projected to fall nearly 10 million tons from 1992/93 to 190 million, according to USDA's early projections, with a small decline in wheat trade combined with a sharp drop in coarse grains. U.S. exports are projected to mirror this pattern—down 10 million tons to 79.3 million. Eastern Europe and other regions recovering from last year's drought are expected to reduce imports in 1993/94, while imports by the FSU continue to decline. Australia, which suffered from poor harvest weather in 1992, is likely to boost exports this year. The early trade

forecasts could change significantly if adverse weather develops in any of these major trading countries.

Foreign grain production is projected to fall 1 percent in 1993/94, and consumption is expected to remain unchanged. The gap could be met with larger imports, boosting trade, but a drawdown in foreign stocks is projected instead. Global stocks-to-use ratios are projected to decline from the relatively high 1992/93 levels, and stock declines will be particularly apparent in wheat exporting countries that are striving to maintain or expand market share, as well as in China where market reforms may alter patterns of consumption, stock holding, and trade.

U.S. wheat exports are expected to fall because of a small drop in world trade, but mostly because of increased competition. However, U.S. corn exports are projected down because of a strong contraction in global imports. U.S. grain market share is projected to fall from 45 percent in 1992/93 to 42 percent in 1993/94, primarily reflecting gains in competitor wheat exports.

Strong competition for the smaller world wheat market is expected to force wheat export prices down during the 1993/94 marketing season, while weak import demand is contributing to relatively low coarse grain export prices. Slow early-season U.S. exports, and uncertainty regarding sales to China and the former Soviet Union, are factors in the relatively low level of U.S. domestic wheat prices.

Forecasts Reflect Uncertainties

The effects of changing trade policies and other uncertainties in key trading regions and countries—including China, the former Soviet Union, the European Community, and the U.S.—could lead to adjustments in USDA's early 1993/94 trade projections. Among the major importers, China and the FSU have traditionally accounted for uncertainty in world grain trade forecasts.

Higher domestic prices in the FSU, reduced government subsidies, and falling consumer incomes have led to declines in grain consumption. This decline in use, coupled with a financial crisis that has curtailed commercial grain imports, has reduced potential for a sharp increase in imports in response to a crop shortfall or difficulties in procuring the domestic crop in 1993/94. Also, the FSU has become increasingly dependent on financial assistance from exporting countries, and changes in the expected level of assistance could lead to adjustments in the early forecasts.

China has been experiencing rapid economic growth and introducing policy reforms to encourage market forces. As the central government reduces control of the grain sector, China is drawing down large stocks of grain, which would tend to depress import demand for wheat while supporting continued large exports of corn. On the other hand, strong economic growth could lead to higher demand for grain than projected.

Exporter behavior is also adding uncertainty to the forecast for 1993/94. Government decisions about credit guarantees, subsidized exports, food aid, and concessional sales have become more critical in recent years in determining the volume of world grain trade, particularly regarding FSU grain imports and the wheat market in general. The timing and volume of U.S. Export Enhancement Program (EEP) announcements, for example, are affecting trade decisions in importer countries and adding more uncertainty to the early forecasts.

The potential impact of EC reform of the Common Agricultural Policy (CAP) is also a source of uncertainty. There is much debate on the impact of policy adjustments, such as how much lower grain support prices will raise domestic use and possibly lower exportable supplies in the EC. While some effect in later years is likely, USDA expects reform to have little impact on EC grain exports this year because of large carryin stocks.

Competitors' Wheat Exports Expected Up

Foreign wheat production is projected at 486 million tons, down about 1 percent from 1992/93, largely due to declines in the former Soviet Union, China, and the European Community (EC). The small increase projected in global consumption follows the pattern of the 1990's to date—relatively small increases in use compared with the 1980's, largely reflecting the movement of the former Soviet Union and Eastern Europe toward market

economies. Less wheat has been imported as bread prices have increased in these countries, waste has declined, and less wheat is being used in the shrinking livestock industry.

World wheat trade in 1993/94 is projected at 104 million tons, down 4 percent from 1992/93. Production declines in China and North Africa are projected to stimulate increased imports by those countries. However, sharp import declines projected for the FSU, India, and southern Africa will likely more than offset the increases.

Coarse Grain Exports Down for U.S. and Major Competitors

	1991/92	1992/93	1993/94
<i>Mil. met. tons</i>			
Wheat trade			
Major exporters			
Argentina	5.5	5.5	6.0
Australia	8.2	9.1	11.7
Canada	24.2	21.0	20.0
EC	21.9	22.0	21.0
Subtotal	59.8	57.6	58.7
U.S.	35.1	37.0	32.0
Importers			
Former USSR	22.2	22.4	21.0
China	15.8	7.0	9.0
North Africa	12.9	14.6	15.7
Eastern Europe	1.1	3.7	2.7
Japan	5.8	5.7	5.7
South Korea	4.4	3.8	4.5
Others	47.2	50.8	45.5
Total	109.4	108.0	104.1
Coarse grain trade			
Major exporters			
Argentina	7.5	8.6	7.7
Australia	2.3	3.3	3.0
Canada	4.9	3.5	4.2
China	9.6	9.3	8.8
EC	9.8	9.9	9.0
South Africa	0.8	0	0.4
Thailand	0.5	0.1	0.3
Subtotal	35.4	34.7	33.4
U.S.	50.2	52.3	47.3
Importers			
Former USSR	16.7	11.3	9.0
Japan	21.8	21.5	21.4
Mexico	6.2	5.1	5.6
South Korea	6.3	6.6	6.6
Saudi Arabia	7.4	6.2	6.0
Taiwan	5.7	5.7	5.7
Others	29.9	35.3	31.6
Total	94.0	91.7	85.9

Marketing years: wheat, July-June; coarse grains, October-September. 1992/93 preliminary. 1993/94 forecast. Excludes intra-EC trade. Includes intra-FSU trade.

Commodity Spotlight

Supplies are abundant in exporter nations despite projected small production declines in the EC and Canada. However, beginning stocks are large in the EC, and the supply of quality grain is expected to be higher than last year in Canada and Australia. Large exportable supplies among foreign producers is expected to increase competition and reduce export prices. While U.S. market share is expected to fall from 34 percent in 1992/93 to 31 percent in 1993/94, Australia's market share is expected to increase and Canada's will remain stable, due to the larger supply of quality grain and to the aggressive marketing of wheat for feed use.

In the EC, adverse weather in the United Kingdom and Spain, along with the set-aside program (part of the CAP reform), are responsible for a 8-percent decline in area from 1992/93. Despite a forecast 2-percent increase in consumption in the EC, the result of an expected increase in feed use, record carryin intervention stocks should provide the EC with ample export supplies. The former Soviet Union and Eastern Europe are expected to continue importing large quantities of wheat from the EC, assuming credit and food aid are provided.

Producers in Canada, Australia, and Argentina began planting their wheat crops in April, aware that export prices would be much lower than in 1992/93. Canadian producers are reported to have reduced area 6 percent, because returns from canola are expected to be more favorable. In Argentina, although there was no economic incentive to expand area, improved planting conditions brought some acreage back into production. In Australia, with returns from wool and sheep meat even lower than those expected for wheat, producers were expected to shift some area out of pasture and into wheat. However, the second year of drought in Queensland and New South Wales is constraining area expansion.

Wheat exports from Australia and Argentina are projected to increase in 1993/94. Canada's exports are projected down 5 percent. Stocks are high in Canada and Australia, and include the low-quality wheat from the 1992/93 crop, which is expected to be aggressively marketed for

feed, particularly in South Korea. Canada's exports are projected at 20 million tons, and Australia's are projected up 29 percent to 11.7 million tons.

Argentina is expected to expand exports 9 percent to 6 million tons. Production is projected up 11 percent, providing Argentina with larger exportable supplies. Argentina will likely be the primary beneficiary of increased import demand in Brazil, because of preferential tariff arrangements.

Smaller wheat exporters are projected to maintain their market share in 1993/94 despite a decline in export volume.

U.S. Market Share Declines for Wheat

U.S. wheat exports in the 1993/94 marketing year (June 1-May 31) are projected to fall 11 percent to 32.7 million tons, and early-season sales have been slow. In contrast with the usual pattern—between 15 and 20 percent of U.S. annual sales made by the beginning of the marketing year—outstanding sales in the first week of July were the lowest since at least 1981. Similar to the 1992/93 marketing year, early-season sales are slow because China—often a major early-season buyer—has not yet purchased any U.S. wheat. In addition, Export Enhancement Program (EEP) allocations were not announced until the end of June, and the timing of an announcement for a new financial assistance package for the former Soviet Union remains uncertain.

And as in early 1992/93, some importers are likely waiting to gauge competition among major exporters. These importers may wait until the European crop comes to market, spring crops are harvested, and more information about the size of Southern Hemisphere crops becomes available.

In the meantime, slow exports, and uncertainty regarding sales to China and the former Soviet Union, are contributing to the relatively low level of U.S. domestic wheat prices. Last year, the poor quality of crops in Canada and Australia, com-

bined with unusually large imports by India, Pakistan, and southern African countries, helped boost U.S. wheat exports and expand U.S. market share to 34 percent. Assuming normal weather, a replay of these occurrences is not likely, and the U.S. market share is forecast down to 31 percent.

Coarse Grain Trade Continues To Weaken

World trade in coarse grains is projected to drop 6 percent in 1993/94 to 85.9 million tons, due to a sharp fall in corn imports. Little change is expected in barley and sorghum trade, and an increase in oats trade is offset by a decrease in rye.

Foreign coarse grain production is projected to fall slightly in 1993/94, the fourth consecutive annual drop, while consumption is up slightly. However, lower production will not boost trade prospects because most of the decline is projected in countries that are not significant coarse grain importers—India, China, and the EC. Lower production in China and the EC, both large net exporters, is also not expected to reduce exportable supplies appreciably, because those countries have large stocks of coarse grains.

Global trade is forecast to be the lowest since 1986/87. Aggregate foreign import needs are not growing, largely because foreign consumption has been stagnant in the 1990's. The former Soviet Union and Eastern Europe account for much of the stagnation, their feed grain use reduced by a sharp contraction in livestock production.

Coarse grain use and imports also continue to decline in Western Europe, and have begun to flatten in Japan in recent years. Japan—formerly a consistent growth market—is importing more meat and less feed grain under liberalization of its meat trade. Rapid consumption growth in China and many developing countries has not been sufficient to outweigh these declines.

Corn Imports To Plummet

World corn trade—the largest component of coarse grain trade—is projected to decline 10 percent in 1993/94 to 55.6 million tons, the lowest since 1985/86. This anticipated decline reflects larger crops in some importing countries, continued substitution of feed wheat for corn imports in South Korea, and continued weak imports by the FSU.

Southern Africa, now recovering from severe drought in most of the region, will account for much of the reduction in imports. Corn imports by South Africa are projected to plunge to zero from the 2.3 million tons in 1992/93. Combined imports by the rest of the region are projected to fall nearly 1 million tons in 1993/94. The extent of year-to-year change will be muted in some countries, such as Mozambique, because of continuing food shortages related to civil unrest. Better crops are also expected to lead to reductions of 1 million tons in corn imports by Canada and 750,000 tons in Eastern Europe.

Corn imports by South Korea are projected to remain near the 1992/93 level of 6.5 million tons because importers are expected to continue buying large amounts of wheat for feed. South Korea purchased large amounts of feed wheat from Canada and Australia in 1992/93, and even a small quantity from China. Although South Korea has been one of fastest growing markets for corn over the last two decades, it is also very price-responsive and flexible in its import decisions. When wheat is attractively priced, South Korea is the world's largest buyer of wheat for feed.

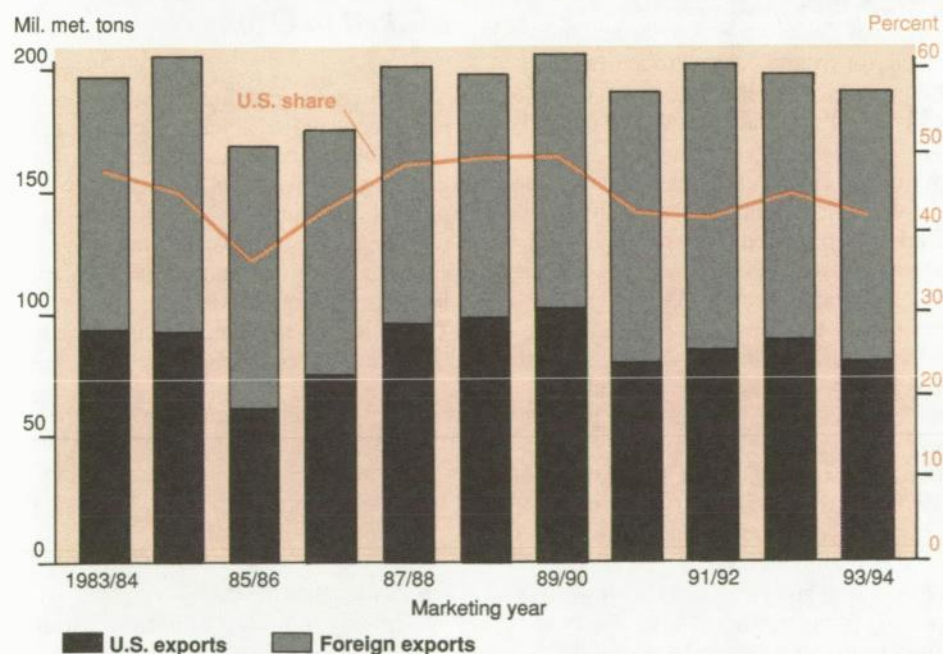
Corn imports by the former Soviet Union are projected to fall 1.5 million tons to 6 million tons, and will depend on continuing assistance from the U.S., the major FSU corn supplier. The low level of imports expected by the former Soviet Union largely underlies the historically low volume of world corn trade. Corn imports by the FSU were more than 19 million tons in 1989/90 but have dropped every year since.

World trade in barley is expected to rise slightly in 1993/94, to 17.4 million tons, largely because of higher import needs in North Africa. Crop shortfalls in Algeria and Morocco are likely to result in higher imports, outweighing expected declines in Saudi Arabia and the FSU, the world's largest importers. The outlook for most other countries is relatively stable.

Large stocks account for some of the decline in Saudi barley imports, as well as expectations of a modest increase in domestic production. Barley and other grain imports by the former Soviet Union are highly dependent on exporter assistance. The forecast will hinge largely on political decisions to provide assistance by the EC and Canada, the largest barley suppliers to the FSU, as well as by the U.S., Turkey, and smaller exporters.

World sorghum trade is expected to remain unchanged in 1993/94, at 9 million tons. Mexico and Japan are the biggest importers, and virtually no change in sorghum imports is projected in these countries in 1993/94. However, if the North American Free Trade Agreement is implemented during the year, Mexico's imports of sorghum will likely drop and corn imports increase.

U.S. Share of World Wheat and Coarse Grain Trade To Slip



Includes intra-FSU trade beginning in 1987/88. Marketing years: wheat, July-June; coarse grains, October-September.
1992/93 preliminary. 1993/94 projected.

U.S. & Competitors' Corn Exports To Fall

Following the pattern expected in world trade, U.S. exports of corn are projected to decline, while shipments of sorghum and barley are expected to match 1992/93. U.S. coarse grain exports are projected to fall 10 percent to 47.3 million tons in 1993/94, bringing U.S. market share down from 58 percent in 1992/93 to 56 percent. While in the wheat market export competition is expected to intensify, competitor exports of coarse grains are projected to retract slightly. U.S. corn exporters are expected to face shrinking import demand for corn rather than sharper competition.

U.S. corn shipments during the 1992/93 trade year, which ends in September, have benefited from weather-induced shortfalls in many countries. In addition, the U.S. provided a relatively large

Commodity Spotlight

allocation for corn in food aid and credit packages for the former Soviet Union. These factors helped boost the forecast U.S. exports to 43.5 million tons in 1992/93, up 7 percent from the previous year. However, with a return to normal weather in importing countries, the U.S. will lose much of this trade in 1993/94, and exports are projected down 11 percent, to 38.5 million tons.

China is expected to remain the largest foreign corn exporter in 1993/94, with exports projected at 8.5 million tons, down from 9 million in 1992/93. Reported large stocks and recent decentralization of the government's export monopoly would support continuation of high corn exports, although market reforms and rapid economic growth could lead to increased domestic demand which could erode exports or stimulate corn imports for distribution in corn deficit areas.

Small declines are projected in Argentina's 1993/94 corn exports, but prospects will hinge mainly on crops that will not be planted until much later this year. Argentina's 1992/93 corn exports are forecast at 6.7 million tons, a 14-percent gain over the previous year and the highest since the mid-1980's.

Among the minor corn exporters, South Africa is projected to resume small exports in 1993/94. But no exports are likely until late in the year, and prospects will depend on a favorable outlook for the new crop. An increase is also expected in Thailand's corn exports, due to some easing in growth of domestic feed corn demand with the slower pace of poultry exports to Japan. EC corn exports are projected at 500,000 tons, above normal because of very large stocks, but still 500,000 tons below the 1992/93 forecast.

[Pete Riley and Sara Schwartz (202) 219-0825] **AO**

Environment & Resources



Measuring Air Pollution In Farm Areas

Evidence that air pollution is damaging to agricultural crops, forest ecosystems, and other vegetation has been accumulating for several decades. A 1984 report by Congress's Office of Technology Assessment indicated, for example, that ground-level ozone causes about a 6- to 7-percent loss of U.S. agricultural productivity annually.

Wind and clouds carry air pollutants into the countryside and forests, often far from the congested cities and industrial towns where they originate. The U.S. Environmental Protection Agency (EPA) monitors emissions from fixed sources, such as power plants, as well as ambient levels of pollutants in the atmosphere, and sets standards for allowable pollution in order to protect human health, vegetation, and property. The Clean Air Act of 1970, implemented by EPA, set standards that were intended to improve air quality mainly in urban areas, although agricultural and rural areas downwind of heavily populated areas have also benefited from industrial and automobile emissions reductions.

In recent work, USDA's Economic Research Service has used air pollution indexes to identify changes in county air pollution levels between 1980 and 1990. These indicators show where pollution may still exist at levels that can damage agricultural crops. Many areas have seen dramatic improvements in overall air quality during the 1980's, but some still experience high levels of certain pollutants.

The provisions of the Clean Air Act Amendments of 1990 (CAAA) include a 10-million-ton reduction in industrial emissions of sulfur dioxide by the turn of the century (about a 50-percent reduction from 1980 levels), and the adoption of reformulated gasolines to reduce urban ozone levels. Cleaner burning fuels leave fewer volatile compounds that contribute to ozone creation, while reduced emissions from factories and power plants produce fewer of the precursor elements that lead to acid rain and other pollutants.

As state and local governments develop implementation strategies to comply with the CAAA, damage to agriculture should continue to abate, helping to boost yields.

Most Crop Damage Linked to Ozone

The effects of air pollution on vegetation have been studied at least since the late 1800's when scientists noticed that plants growing near factories suffered unexplained leaf damage. Since then, scientists have demonstrated that many substances emitted into the atmosphere have harmful effects on plant growth. The following are the main culprits associated with plant damage.

- Tropospheric (ground-level) ozone (O_3), formed in the atmosphere by compounds left over from automobile combustion, is one of the main components of smog.
- Sulfur dioxide (SO_2) is created mainly from the burning of coal and oil, but is also created naturally.

- Nitrogen dioxide (NO₂) is created by mobile sources and photochemical oxidation.
- Sulfate (SO₄) and nitrate (NO₃), two of the components of acid rain, are formed when SO₂ and NO₂ mix with other compounds in the atmosphere.

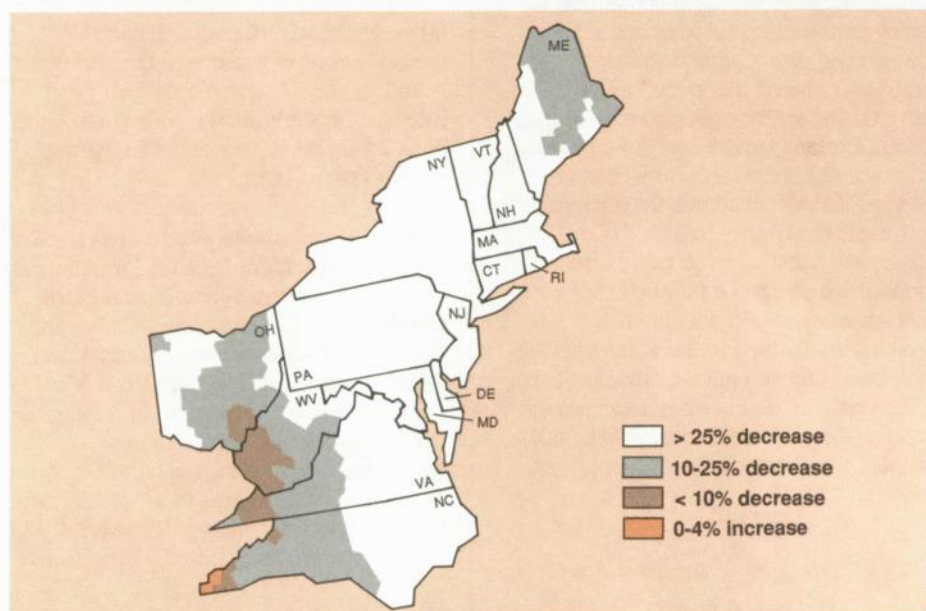
A significant body of evidence suggests that tropospheric ozone can have serious negative effects on crop yields by inhibiting photosynthesis. Ozone has been linked to leaf damage and reduced seed size, which correlate directly with reduced yields. Field studies conducted on individual crops, including soybeans, wheat, cotton, and peanuts, have found yield reductions ranging from negligible amounts to over 50 percent in some cases, depending on the cultivar and the ozone exposure regimen studied.

USDA's Agricultural Research Service, in a 1987 report for EPA on crop loss from air pollutants, estimated that ozone is the source of approximately 70 percent of the damage to vegetation by air pollutants in the U.S. The 1984 Office of Technology Assessment report estimated that as much as 90 percent of the damage to crops from air pollutants may be due to ozone.

Another 1984 economic analysis estimated that a 25-percent increase in ozone concentrations in the troposphere would result in annual damages of \$2.4 billion to U.S. agriculture, while a 25-percent reduction would yield annual benefits of almost \$2 billion. In this analysis, over half the benefits of the 25-percent reduction would accrue to foreign consumers of imported U.S. agricultural goods, although domestic consumers would benefit from slightly lower prices of processed grain and livestock products.

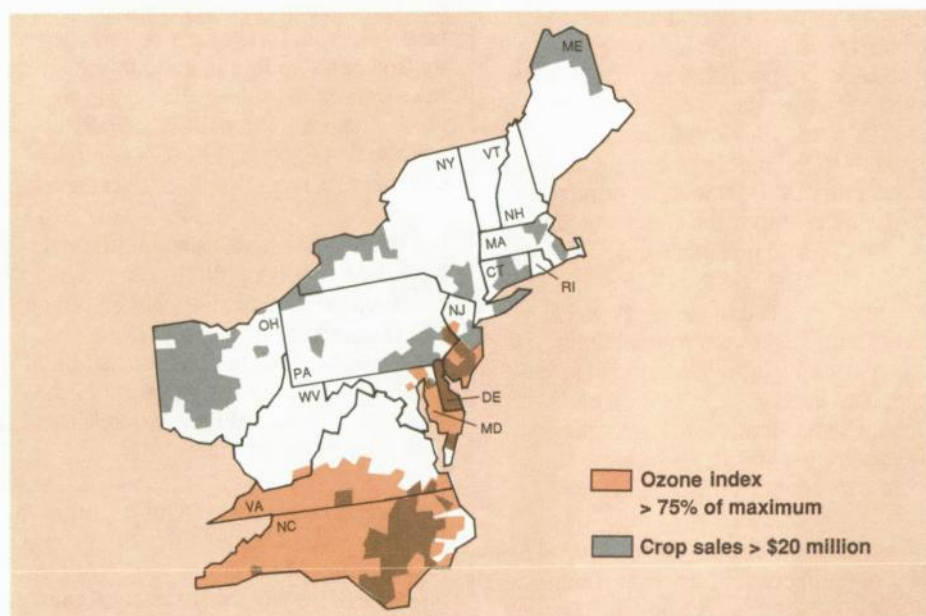
The impact of acid rain on agricultural productivity is more ambiguous. Sulfur and nitrogen in certain forms—sulfur dioxide, sulfuric acid, nitric acid, and ammonium—have been found to impair plant development by interfering with

Ozone Pollution Eased in the 1980's . . .



Ground-level ozone index: weighted sum of hourly ozone levels, April-September. Percent change in ozone index, 1980-90. All increases were less than 4 percent.

. . . But Remains High in Some Farming Areas



Ground-level ozone index, April-September 1990. Value of county's crop sales, 1987 Census of Agriculture.

growth and photosynthesis. However, some scientists argue that acid rain may also have favorable impacts, because acidic wet depositions in rainfall contain compounds that are major plant nutri-

ents. Plants may metabolize sufficient amounts of nitrogen from acid rain to negate the acidic effects, and acid rain may act as a passive fertilizer.

Environment & Resources

The general consensus, based on research to date, suggests that acid deposition at current ambient levels does not reduce annual crop yields, although some researchers contend that even low doses of nitrogen and sulfur pollution can be hazardous to plant growth and development when the exposure lasts for weeks or months. EPA's standards for airborne pollutants apply only to SO₂, NO₂, ozone, and other gaseous pollutants, some of which can be monitored at emission sources, and do not apply to products that are formed in the atmosphere, such as sulfate and nitrate. Indexes for sulfate and nitrate have been developed because the gaseous forms of these pollutants cannot be estimated over large areas.

Pollution Persists in Some Agricultural Areas

USDA's Economic Research Service analyzed county-level air quality indexes for ozone, nitrate, and sulfate. Estimates of nitrate and sulfate concentrations were obtained from the National Atmospheric Deposition Program/National Trends Network, and ozone data were obtained from the EPA's Aerometric Information Retrieval System. Indexes were constructed for the years 1980-90 in the Northeastern U.S., which exhibits the country's highest levels of acid rain and ozone.

The states included in the study were North Carolina, West Virginia, Ohio, Pennsylvania, Virginia, Maryland, Delaware, New Jersey, New York, Rhode Island, Connecticut, New Hampshire, Massachusetts, Maine, and Vermont. These states contain 624 counties.

Pollution concentrations are measured using a summing procedure that reflects the impact on vegetation. Exposure to ozone has decreased over the decade of the 1980's for almost the entire Northeastern region, falling more than 10 percent in large portions of this area, and declining 50 percent or more in 13 counties. Only small regions of Ohio, West Virginia, Virginia, and North Carolina showed

increases in exposure in either spring or summer, and the increases were all under 6 percent. Only 10 counties had increased ozone exposures in the spring from 1980 to 1990, and only 5 showed increases in the summer. (The map on page 25 shows ozone levels for spring through summer.)

Acid rain depositions were more varied, with increases recorded over large areas of New York, Pennsylvania, and North Carolina. On the other hand, Delaware, Maine, Maryland, Massachusetts, Ohio, Rhode Island, Virginia, and West Virginia experienced decreases in depositions of nitrate and sulfate, major components of acid rain. Over 400 counties exhibited decreases in nitrate depositions over the decade, while over 500 showed decreases in sulfate depositions.

The county-level indexes of ozone, sulfate, and nitrate in 1990 were matched with county-level statistics from the 1987 Census of Agriculture to determine the extent of pollution in heavy farming areas. These maps identify counties with a relatively high level of agricultural activity (over \$20 million in agricultural sales), counties with a relatively high level of exposure to pollution (indexes were scaled to equal 100 at maximum), and counties that fall into both categories.

For ozone, most states shared little overlap between heavy pollution and high levels of agricultural activity, but 33 out of 147 counties in New Jersey, Delaware, Maryland, and North Carolina had high levels of both. About 15 percent of the counties in Ohio and Pennsylvania met both criteria for acid rain.

The general downward trend in pollution levels over the decade of the 1980's is a positive sign of the effectiveness of clean air laws. However, many scientific uncertainties remain regarding air pollution, including the appropriate standards for many pollutants and the extent to which agricultural production in rural areas may be affected. The pollution indexes are being used in an ERS study of the effects of ozone and acid rain exposures on agricultural productivity in the northeastern U.S. [David A. Westenbarger (202) 219-0459]

AC

Food & Marketing



Organic Certification: Standards In the Works

Consumer motives in purchasing organically grown products include environmental protection and reduced exposure to pesticide residue. Advocates of organic food perceive better taste and nutritional quality. But, because no definition of "organic" has existed at the national level, consumers have not been certain that products labeled "organic" meet uniform standards for production, handling, and processing.

The Organic Foods Production Act adopted as part of the 1990 Farm Act, calls for national standards to define organic food and assure consumers that food marketed as organic meets certain prescribed standards. The act provides for USDA to develop the standards using recommendations received from a 14-member National Organic Standards Board (NOSB). The NOSB has made significant progress in preparing recommendations to be considered by the Secretary of Agriculture for incorporation into regulations that will implement the law.

A significant market niche has developed for organically produced food and fiber products in recent years, with annual sales in excess of \$1 billion. Organically produced agricultural products now include textiles and coffee, as well as fruits, vegetables, and grains. Organic cotton clothing, for example, is manufactured in the U.S. with a marketing approach that stresses a more environmentally friendly textile process.

In addition, wine and meats are being produced following organic production practices, but cannot be labeled "organic" until Federal standards are in place and approval is granted for wine by the Bureau of Alcohol, Tobacco, and Firearms (BATF), and for meat by USDA's Food Safety and Inspection Service.

Organic food sales at the retail level increased sevenfold during the 1980's, and are expected to triple by 1995, according to Marketdata. A surge in acreage in organic production has accompanied the increase in market demand. A compilation of organic acreage is currently underway at USDA's Agricultural Marketing Service.

Certification: A Brief History

Although organic food marketing may have begun as early as the 1940's, no real effort was made to ensure the credibility of this small but growing food industry until the early 1970's. In 1973, California Certified Organic Farmers (CCOF), an association of producers, began developing production standards for the purpose of reducing fraudulent claims made by other growers and enhancing the market for organic products. CCOF also set up an administrative body to coordinate farm-level inspections and make certification decisions.

Today, 26 private certifying agencies exist around the country, with five operating nationwide. The largest is the Organic Crop Improvement Association, which certifies close to 1,000 of over 5,000 producers currently certified in the U.S.

Oregon was the first state to regulate the use of the term "organic," drafting administrative rules which set production standards in 1974. Now more than half of the states have laws or rules that regulate use of the term "organic" on food labels. Florida, for example, licenses private certifying agencies seeking to operate within the state; California is in the process of registering these agencies; and Texas is on the verge of accrediting them. Ten states have instituted state-level organic certification programs.

While most organic definitions and certification programs have been oriented to food products, Texas has established standards for organic cotton production and textile processing. Texas producers aspire to meet the rapidly increasing demand for organic cotton in Europe and Japan, and have 2,158 acres in state-certified organic production, 6,256 acres in transitional production, and certification applications for 4,586 acres.

Prior to passage of the 1990 Organic Foods Production Act, a task force of organic producers and product handlers, retailers, conventional growers and shippers, officials of state departments of agriculture, and others, agreed to the following definition of the term "organic" at a July 1989 meeting of the United Fresh Fruit and Vegetable Association:

- Organic food production systems are based on farm management practices that replenish and maintain soil fertility by providing optimal conditions for soil biological activity.
- The organic food has been determined by an independent third party certification program to be produced in accordance with a nationally approved list of materials and practices.
- Only nationally approved materials have been used on the land and crops for at least 3 years prior to harvest.
- Organic food is documented and verifiable by an accurate and comprehensive record of the production and handling system.

- Organic food meets all local, state, and Federal regulations governing the safety and quality of the food supply, including the Federal Food, Drug, and Cosmetic Act and the 1990 Nutrition Labeling and Education Act.

This definition was subsequently used in the proposal the organic food industry made to Congress to develop the national organic certification program. The 1990 act provided for the formation of the National Organic Standards Board (NOSB) whose role it is to advise the Secretary of Agriculture on prohibited natural production inputs, permissible synthetic inputs, import requirements, organic crop and livestock production standards, processing and handling standards, and an accreditation program.

NOSB Committees: Issues To Resolve

The NOSB was appointed in January 1992 and first met in March 1992. The organic food industry, which lobbied for passage of the act, has been instrumental in helping the board formulate its recommendations. The board has set up six committees to carry out the tasks assigned to it in the 1990 act.

Crop Standards Committee. Standards for organic crop production have the longest history of deliberation, and are the type most widely adopted among certifying agencies around the world. Inconsistencies among agency requirements exist, however, and this committee confronts issues such as the following:

- Should land used to produce certified organic crops be decertified if subjected to drift of prohibited materials from neighboring farming operations? If so, for how long?
- Should land used to produce certified organic crops be decertified if subjected to a mandatory government emergency spray program, and if so, must 3 full years transpire before organic crops can be sold from such land?

Food & Marketing

The International Scene

Demand from consumers abroad for organic food and fiber products has accelerated in recent years. Canada, the European Community (EC), and Japan have surfaced as lucrative markets for organic product exporters, potentially fueling the expansion of U.S. acreage in organic production.

A survey of Canadian producers and retailers has revealed that between 1990 and 2010, the organic food share is expected to grow from 3 percent to a quarter of the total food market. Much of this expected growth is attributed to demand for processed organic foods.

The development of regulations governing organic labeling in Canada has progressed at a rate equivalent to that of U.S. regulations. An advisory board of organic food industry representatives is working with the Canadian government, and full implementation could take place within the next couple of years.

The Green movement in the EC has influenced consumer preferences, and European consumers, particularly in Germany, are paying a premium for food produced under environmentally beneficial conditions. One firm is marketing organic cotton garments throughout the EC, and the Texas Department of Agriculture reports increasing exports of raw organic cotton to the EC.

Consumer decision-making in the EC is also affected by concerns about synthetic additives and chemical and hormone residues in food. Furthermore, EC consumers tend to be sophisticated in their choices of food products and are particularly brand-conscious. In Germany, agencies certifying organic products compete for recognition among certification seals displayed on organic products at the retail level.

Shipping organic food products to Europe has become more difficult since January of this year, when the EC enacted a provision requiring extensive documentation of the production and handling of imported products labeled organic. Upon implementation of the U.S. Organic Foods Production Act, and conclusive negotiations on equivalency in legislated standards of organic production and inspection, such documentation will no longer be necessary.

The Japanese market for organic foods produced in the U.S. increased by an average of 80 percent each year between 1987 and 1990, amounting to \$1 million in sales by 1990, and is projected to reach \$9 million by 1994. The definition of "organic" is interpreted less stringently in Japan, with several variations of the meaning of the term. However, efforts have begun on a national scale to define "organic" strictly and to develop standards of production and processing. Trade relationships between U.S. producers and Japanese processors establish a consistent supply of organic products in a market where consumers have expressed a willingness to pay up to 50 percent more for high-quality organic food.

Fruit juice concentrates and green coffee beans are the primary organic food products that the U.S. imports currently, according to the Organic Crop Improvement Association, International (OCIA). OCIA certifies close to 7,000 organic growers in 25 foreign countries. This figure accounts for Latin American grower cooperatives, where as many as 10 producers might farm 1 acre.

Several other U.S. private agencies also certify organic producers abroad. The International Federation of Organic Agricultural Movements (IFOAM) seeks to assist groups of organic producers in Latin America and other developing countries with the formation of home-country-based certification agencies that can be accredited by IFOAM and obtain international recognition.

Organic production methods and an interest in exporting organic food are catching on throughout Latin America. Mexico has drafted labeling rules and is positioned to export organically produced vegetables to markets just over the border. Organically produced pineapples and bananas are two tropical products with excellent market potential.

The Rodale Institute in Pennsylvania, whose founder coined the term "organic," has projects in Eastern Europe and the former Soviet Union (FSU) through which farmers are informed of the benefits of organic production and trained in methods that do not require costly petroleum-based inputs. Concern about heavy pesticide and synthetic fertilizer applications over the years is spurring interest in Eastern Europe and the FSU, as elsewhere, in the environmental benefits of organic production.

- What requirements will be specified for "split" organic/nonorganic farming operations, if such operations are permitted?
- Which materials among those that have been historically used on or-

ganic farms are appropriate under the terms of the 1990 act?

Livestock committee. The USDA's Food Safety and Inspection Service has restricted the use of the term "organic" on meat products, until Federal organic

standards are in place. However, many organic certifying agencies have livestock production requirements, and organic dairy products are commonly found on the shelves of natural food stores. Certain issues related to organic methods of livestock rearing have yet to be resolved throughout the community of

organic producers, handlers, and consumers. Thus, the NOSB Livestock Committee faces deliberations over the following subjects related to livestock production:

- certified organic feed requirements;
- antibiotic and parasiticide use;
- husbandry and living conditions relating to "organic" care of animals;
- stocker sources.

Processing and Handling Committee.

The 1990 act specified that no more than 5 percent by weight (excluding water and salt) of nonorganic ingredients may be added to an "organically produced" food. These nonorganic ingredients may be either essential synthetic substances or natural substances unavailable organically.

The committee has struggled with labeling policy for products containing less than 95 percent certified organic ingredients. For products containing at least 50 percent certified organic ingredients, the committee has proposed that the principal display panel may identify the ingredients as organically produced. For example, chili made with organically produced kidney beans that are over 50 percent by weight of the chili, may state "chili made with organically produced beans" on the front label, but the product could not be labeled as "organic chili."

The committee is currently analyzing several issues concerning the use of synthetic ingredients in organic processing. Synthetic ingredients used to sweeten, flavor, preserve, and color processed foods would be prohibited in products labeled "organic," unless an ingredient's natural counterpart was unavailable and the synthetic is determined to be non-harmful and consistent with organic processing standards. Processors may not add synthetic ingredients or ingredients containing heavy metals or toxic residues.

Organic processed products also may not contain nitrates, nitrites, or sulfites, although use of sulfur dioxide in "organic wines" is still under consideration. Sulfites are considered essential to the mak-

ing of palatable white wine by many vintners, and a group of winemakers who use organic grapes has lobbied the processing committee for an allowance to use sulfites derived "naturally."

The winemakers have proposed to restrict the amount of natural sulfites (which are derived by burning sulfur and bubbling the sulfur dioxide gas through water) in wines labeled "organic" to less than one-third of the amount allowed by the BATF. Of the 52,113 acres certified by CCOF in 1992, 6,059 are in organic wine grape production—a threefold increase from 1991. Organic wine vintners constitute a significant market participant. This controversial issue has not been resolved to date.

Packaging and storage containers are also covered by the act, which states that such containers may not be treated with fumigants, preservatives, or fungicides. Meat as a processed product is also addressed by the act. An audit trail, which can trace a retail package back to the producer, may need to be in place for organic meat and other organic products, and organic products must not come into contact with nonorganic products.

An element common to the Crop Standards, Livestock, and Processing and Handling Committees is the Organic Plan—a written document developed by the producer or handler to plan and evaluate certified organic farm or handling facility management practices. This plan would also provide the certifying agency with the information necessary to assess the producer/handler's compliance with the act.

Materials Committee. This committee is formulating a procedure for developing the national list of prohibited natural and allowed synthetic production inputs, and is coordinating the formation of a technical advisory panel to review the substances proposed for the national list. Substances such as livestock medications, synthetic inert ingredients, essential processing aids, detergents, and genetically engineered products will likely be among the substances reviewed.

International Committee. The act requires any imported organic product to have been certified under a program equivalent to that of the U.S. The board may be asked to advise the Secretary on the equivalency of certification programs. The International Committee is currently addressing requirements for organic product imports from countries that have no national-level organic labeling standards or have no government monitoring of the organic label. The committee also makes recommendations to the board regarding harmonization of production standards across countries.

Accreditation Committee. The Accreditation Committee of the NOSB is developing a comprehensive program of certifying agent accreditation to recommend to the Secretary of Agriculture. Accreditation, according to the committee, may consist of an application, a field evaluation including an audit of agency records, and peer review of performance. Essential elements for evaluation may include certifying agent qualifications, accessibility of decision-making records, and an absence of a conflict of interest between the agency and the producers/handlers certified.

The proceedings of the NOSB have been followed in great detail by organic food producers and processors, certifying agencies, state and foreign governments, consumer groups, and the media. The standards and accreditation program development process has encouraged widespread public participation, with open forums established at board meetings held around the U.S. The board also solicits public comment on committee positions, and is seeking consensus in the organic community in advance of USDA's rulemaking process.

Industry Challenges Ahead

In establishing organic production standards and inspection measures, there is a need for balance between consumer and producer interests. Strict regulations may help to instill consumer confidence, but unreasonable production standards, expensive testing requirements,

Food & Marketing

Germany Moves Ahead on EC Organic Law

In June 1991, the European Community (EC) Council passed Council Regulation No. 2092/91 on organic production of agricultural products. This regulation harmonizes the organic production of agricultural products for member states by creating a label specifying organic practices including processing methods. It also describes the certification systems which member countries need to set up, and outlines tentative procedures for importing organic products from third countries.

Implementation has begun in several countries, including Germany. The organic sector in Germany, a small but well organized group of producer organizations with a loyal clientele, faces the likelihood of considerable change in the demand and supply of organic agricultural products as a result of this regulation and more recent changes to the Common Agricultural Policy.

Until the late 1980's, six established organic producer organizations in Germany certified (through membership) and strictly controlled production practices by members, and provided marketing support through label development. Federal and state regulation of the organic sector, however, was minimal with no legal definition of "organic."

The EC regulation stipulates that member states shall set up an inspection system operated by one or more designated inspection authorities and/or by approved private bodies. Several EC countries already have government involvement in organic certification. In Germany, where the private sector undertook this role, each state is to establish an accrediting body. This state accrediting body is responsible for accrediting private certification agents, and ensuring that these firms have the proper organization and personnel. The existing six organic producer organizations have been accredited, and there are currently as many as 51 private certifying agents.

The rate of development of this system across states in Germany is expected to vary for several reasons: (1) no federal funds are provided for this regulation system, and (2) the interest in organic production varies from state to state due to the number of organic producers and their influence in state politics.

Due to the unique situation of a unified Germany, progress has been rapid in the development of the farm certification infrastructure in the new eastern states. The decision under new EC regulations to include organic farmers in direct payment programs (Council Regulation 2078/92) has helped spur conversions of former state farms in the eastern states. This increase has likely occurred because eastern farms are in a transition phase where alternatives are unclear and organic premiums are considered attractive, especially combined with relatively low input costs in an area where labor is generally cheaper and in a sector that is labor intensive. In addition, the income support can immediately improve the cash flow position of these farms. In 1993, 100,000 hectares in eastern states were under organic production, compared with 30,000 in western states.

The original producer organizations in the EC and the respective farmer members had experienced high price premiums throughout the 1980's, had relatively good control over the supply of organic products, and saw stable growth in sales. These producers must now adapt to changing market conditions. The introduction of the new label "Organic Farming—EEC Control System" may mean that new consumers are brought into the market, or it may succeed merely in substituting for other labels. The harmonization of products of EC member countries will also raise the likelihood of increased imports as competition for domestic products. Additional competition may arise from the new EC regulations which support farmers using low-input methods.

[Kristi Cook (202) 219-0438]

excessive paperwork, and costly certification fees will discourage organic production.

The development of crop varieties that can withstand the onslaught of insects and diseases now controlled by synthetic chemical pesticides can take many years. Crop rotation strategies, used to establish fertile soil for healthy plants that are less vulnerable to pests, take time to learn and develop, and crop yields may decrease during the transition period. Also, certain crop rotation strategies involve the planting of cover crops, which takes land out of marketable commodity production for a time.

Organic certification cannot be granted until the land has been free of synthetic chemical application for 3 years, according to the 1990 act. Because there is generally no premium for products labeled "in transition to organic," and no official label will be established under Federal regulations, the reduced level of production and income during the transition period may lessen the incentive to shift to organic production.

Institutional barriers may also exist that discourage farmers to switch to organic production. Lending agencies are making their decision to grant operating loans to farmers based on perception of

production capacity, and that capacity may be judged by how extensively the farmer has followed pesticide and other university extension recommendations. Also, USDA's crop support programs have not historically provided for routine organic production practices, such as pest control and fertilization with green manures; however, the new integrated farm management program option, outlined in the 1990 Farm Act, allows for some economic use of rotation crops.

Organic producers could benefit from an expansion of organic food market channels, which have not yet been adequately adapted for fresh organic products.

Increased farm-level supply, without marketing channels and the capacity to funnel the products to consumers, will only serve to depress farm-gate prices.

Options for Consumers

Conventional supermarket retailers not currently carrying organic food products do not yet see organics as creating sufficient profit for their stores, although the majority believe that organics are more than "just a fad," according to a study of New Mexico grocery stores. Conventional retailers may benefit from education in handling and merchandising organic food products, which require the use of an audit trail and a unique approach to handling products differentiated by their appeal to the consumer.

While organic sales have risen dramatically in the large, full-service natural food stores in recent years, sales still lag in the mass-market conventional supermarkets. Supermarkets require that products given valuable shelf space must be available year-round and in consistent quality, conditions that have not always been met by organic products in the past. Furthermore, a comprehensive study of retailers in the Northern Plains found that they could expect to charge consumers an average 10 cents per pound premium for organic produce, which did not always cover the cost of handling organic products.

There is an increasing body of literature on the subject of consumers' preferences for "organic" quality characteristics, and their reported willingness to pay for organic food products. Quality characteristics perceived by consumers include the environmentally beneficial aspects of organic production, reduced pesticide residues in foods, and reduced farm-worker exposure to synthetic chemicals. Among the myriad of labels that allude to pesticide practices—"pesticide-free," "transitional," "IPM," and "no spray/low spray"—the only products that retailers and consumers will be assured are grown with a consistent standard of identity are those that are "certified organic."

[Julie Anton (202) 720-8042 and Betsy Frazao (202) 219-0864] **AO**

Upcoming Reports from USDA's Economic Research Service

The following are August release dates for ERS update reports (specified) and for summaries of situation and outlook reports. Summaries are issued at 3 p.m. Eastern time.

August

- 12 Cotton & Wool Update
- 13 Livestock & Poultry
- 18 Fruit & Tree Nuts
- 19 Agricultural Outlook
- 20 Feed
- Livestock & Poultry Update
- 23 U.S. Agricultural Trade Update
- 25 Cotton & Wool
- 26 Dairy
- 27 Agricultural Exports

Special Article



Asia in the 1990's: Agricultural Trade Prospects

During the 1980's, Asia emerged as the world's fastest growing regional market for agricultural commodities. Asia has also become the largest regional market for U.S. agricultural exports, and strong growth in Asian demand for major U.S. agricultural products is projected to continue through the 1990's. The relatively strong performance of Asia's varied economies will continue driving import growth.

Asia's key players are Japan and the industrializing countries of East Asia, huge and dynamic China, Southeast Asia's rapidly growing "young tigers," and the large developing countries of South Asia.

Several trends are key to the 1990's outlook. Import demand in Japan and other East Asian markets, which account for most Asian farm imports, will continue to shift away from bulk commodities and towards processed products. At the same time, the rapidly developing economies of Southeast and South Asia are expected to show the fastest growth in farm imports, primarily of bulk commodities.

China creates the most questions in the outlook because of its size and uncertainty about the path and agricultural impacts of future economic reform and growth. China's farm exports are forecast to rise in the near term but, by the mid- to late 1990's, rising internal demand is expected to shrink exports of bulk

commodities and increase market opportunities in Asia for the U.S. and other suppliers.

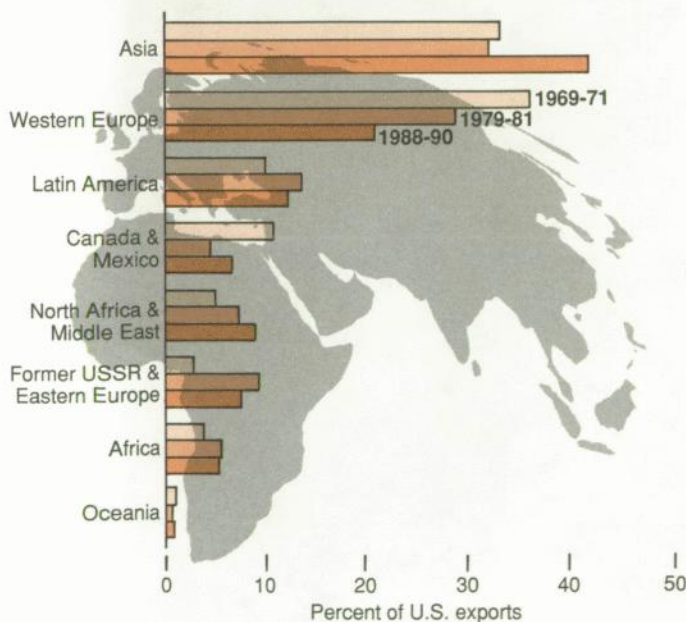
The growing Asian market will continue providing opportunities for U.S. farm exports in the 1990's. Rising East Asian demand for meats and other value-added products will provide a growing, increasingly open market for U.S. exporters. It will also be increasingly important for U.S. commodities to maintain or raise market share in other Asian markets, where strong growth in import demand is likely and past U.S. shares are relatively unstable or low.

Economic Growth Is Key to Asia Outlook

The outlook for Asian agricultural trade during the rest of the decade is sensitive to assumptions on economic growth, as well as changes in consumer behavior, crop productivity, and agricultural and trade policy. For the more developed East Asian markets, the dynamics of consumer behavior and potential changes in farm policy provide the most uncertainty. Elsewhere in the region, income growth prospects and crop productivity gains are also important factors in the outlook.

Relatively strong economic growth has been a key factor driving gains in Asia's share of global farm imports and U.S. farm exports. Growth in most Asian countries has exceeded the world average in the last two decades. In the 1990's, Asian import demand will again hinge on economic performance.

Asia Is Top Market for U.S. Farm Exports



Percent of U.S. export value.

Source: United Nations Food and Agriculture Organization.

The USDA projections are based on the following long-term economic outlook:

- World growth is expected to remain slow through the mid-1990's, with a moderate recovery in the U.S. and other industrialized economies. Stronger global growth is expected by the mid-1990's, led by improved performance in Canada, Western Europe, and Japan, but growth is expected to remain slower than in the 1980's.
- Japan's economic growth rate is expected to slow from more than 4 percent in the 1980's to near 3 percent in the 1990's, while growth in other East Asian countries is projected to slow from an average of nearly 8 percent to about 7 percent. Slower growth in global demand is expected to affect economic performance in these relatively trade-dependent economies.
- China's economy grew nearly 9 percent per year in the 1980's, fueled by market-oriented reforms. It is unlikely that future reforms offer the potential to sustain such high growth. However, growth is expected to remain relatively strong and average about 6 percent per year in the 1990's.
- The Southeast Asian economies are expected to continue to expand rapidly, with the region's average growth rate rising from 6 percent in the 1980's to about 6.5 percent in the 1990's. Policy adjustments and strong resource endowments are expected to continue to drive strong growth.
- South Asia's economic growth strengthened to an average of 5.5 percent annually in the 1980's, with liberalizing reforms and large internal markets providing the major impetus. Further reforms, combined with strong resources and internal demand, are expected to sustain this growth rate in the 1990's.

The USDA projections account for expected changes in incomes, underlying supply and demand relationships, and national policies in the major Asian markets. However, they do not account for potential multilateral trade reform under the General Agreement on Tariffs and Trade (GATT). The yet-to-be-completed GATT accord could have significant impacts on farm trade.

Processed Imports To Grow In East Asian Markets

Although growth in import demand is projected to be slower than elsewhere in Asia, East Asia—Japan and the newly industrialized countries of Hong Kong, South Korea, and Taiwan—will continue to account for a dominant share of Asia's farm imports in the 1990's. Future imports will consist increasingly of higher valued processed farm products. Meats will account for a major share of such imports, along with fresh and processed fruits and vegetables, beverages, and tobacco products.

Most Commodities To Gain In the 1990's

Asia registered rapid growth in imports of several commodities in the 1980's, including meats, soybeans, beverages, and tobacco products. Asia also remained a major and growing importer of wheat, coarse grains, cotton, and edible oils. Commodities where Asia's imports were relatively small and declining were few, but included dairy, egg products, and rice.

As in the 1980's, U.S. exports to Asia in the 1990's will be affected both by changes in import demand, and in the degree of competition U.S. exporters face from Asian suppliers. For example, U.S. exports to Asia face competition from China (corn, soybeans, and oilmeals), India (oilmeals), and Thailand (corn, rice, and poultry).

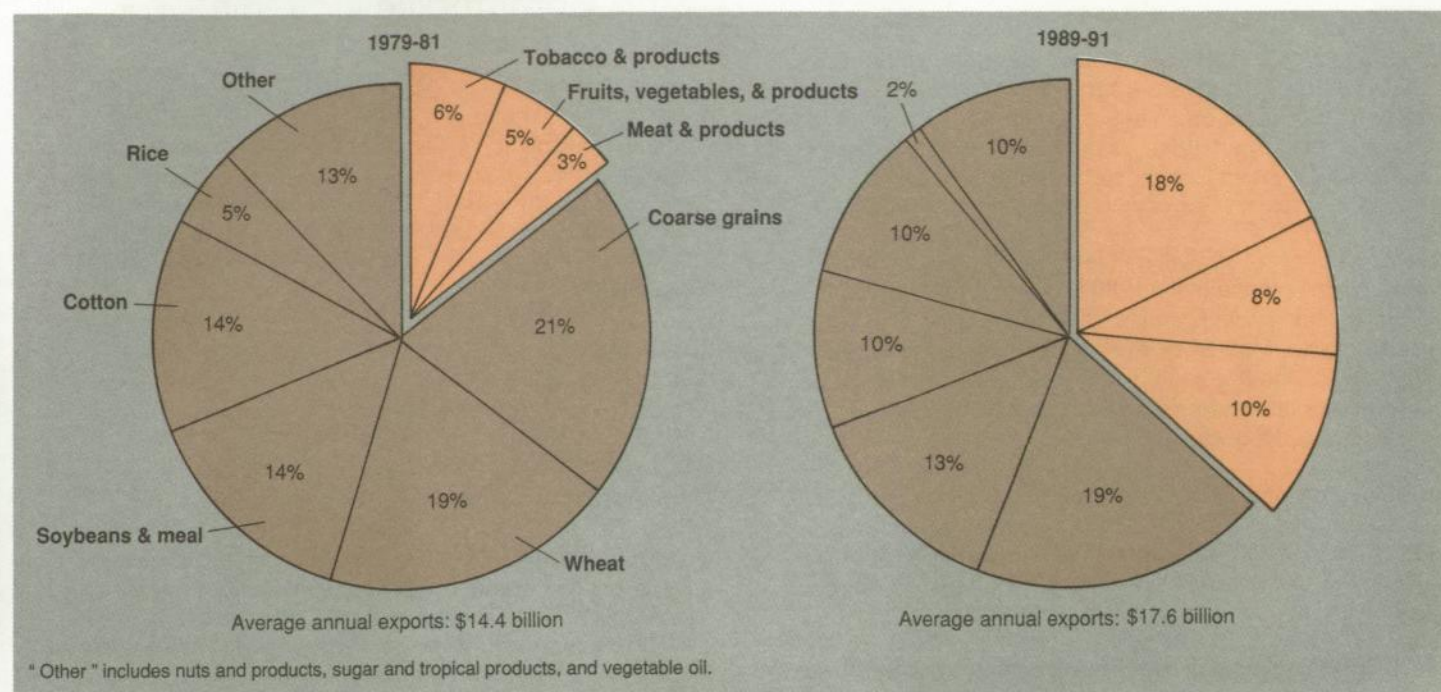
The regional analyses of East Asia, China, and South and Southeast Asia identify expected future trends in imports and exports in each region, and the factors underlying those trends. The implications of these trends for U.S. export opportunities can be summarized by comparing projected 1990's growth in Asian net imports with actual growth in the 1980's. Strong gains are projected for Asia's net imports of most major commodities.

- For wheat and coarse grains, Asian net imports are projected to expand more rapidly in the 1990's than during the 1980's.
- Growth in net imports of meats is projected to slow compared with the 1980's, but still exceed growth for other commodities.
- Net import demand for both soybeans and meals is projected to expand rapidly, with demand for soybeans likely to grow significantly faster than in the 1980's.
- Growth in net exports of rice is projected to slow, but remain relatively strong.
- Asia's net imports of cotton showed little growth in the 1980's, and are projected to shrink in the 1990's.

Changes in food demand and agricultural policies are key factors affecting the shift in the composition of trade. East Asia's relatively high incomes have led to diversification of diets in favor of meats and other processed goods. Demand for rice and wheat will continue to stagnate as consumers shift their diets away from food staples. While demand for beef, pork, and poultry will remain strong in the 1990's, growth will slow from the rapid 1980's pace because of slower projected income growth and the higher levels of consumption already achieved.

Special Article

High-Value Products Take an Increasing Share of U.S. Exports to Asia



More liberal meat import policies—stemming from pressure by trade partners and from concerns about high domestic meat prices—have also been fundamental to the rapid growth in meat imports by Japan and other East Asian countries that began in the 1980's. These pressures, plus emerging concerns with the environmental costs of intensive livestock production, will likely continue to boost meat imports and slow domestic livestock production in the 1990's. Taiwan's exports of pork are projected to fall as environmental costs curb domestic livestock production, leading to a further slowing of import demand for feed grains and protein.

Despite reforms in meat trade, liberalization of domestic and trade policies that would boost imports of some bulk commodities, particularly rice, is unlikely without a multilateral agreement. Farm restructuring and declining support are expected to gradually reduce crop production in East Asia.

East Asia—which now accounts for about 70 percent of Asian cotton imports—is also projected to show a further decline in demand for raw cotton in the 1990's. East Asian imports are shrinking as cotton spinning and weaving shift to lower wage areas, including China and South and Southeast Asia. Increasingly, East Asia's cotton imports will be in the form of yarns, cloth, and finished products.

Income Growth in China Alters Food Demand

China is expected to increase wheat imports and decrease exports of most other bulk commodities in the 1990's. However, China is a key source of uncertainty in the Asian trade outlook. Expanding demand and emerging supply constraints are expected to affect agricultural trade in the 1990's, but the pace of change is hard to predict in the context of the rapid evolution of agricultural policy and supply and demand relationships.

Rising incomes, combined with domestic price adjustments associated with movement to a market economy, are beginning to turn demand away from food staples and toward livestock products. The government will continue to emphasize market reforms, which are likely to result in reallocation of land and other resources to minimize imports. This implies shifting land use from rice production to corn, oilseed, and cotton production, as well as boosting livestock output. However, the land and water resources to boost crop area and yield appear to be limited. Little growth in cropped area is expected and, in the absence of new technologies, yield growth is expected to slow because of the relatively high yields already attained.

Despite somewhat slower growth in incomes than in the 1980's, growth in wheat demand in China—Asia's largest producer and consumer—is expected to outstrip supply in the 1990's. China is expected to account for about 40 percent of all growth in

Asian wheat imports in the 1990's. Rice trade, however, is projected to decline as diet diversification slows demand and land is shifted out of rice cultivation.

China's current exports of corn, soybeans, and soybean meal are projected to fall by 2000. Rising meat demand, marketing reforms, and increased feed use of corn will sustain rapid growth in livestock output and feed demand. Rapid, possibly accelerating, growth in cotton use is expected in China to meet domestic and export demand, but constraints on area and further yield gains will likely slow output growth and limit raw cotton exports. Reduced competition from China in neighboring markets for corn, soybeans and meal, and cotton will expand opportunities for exports to Asia by the U.S. and other suppliers during the 1990's.

Feed Demand To Influence Southeast Asia's Trade Dynamic

Southeast Asian countries, particularly Indonesia, Malaysia, and Thailand, are expected to sustain rapid income growth during the 1990's. Other major countries, including the Philippines and Vietnam, are projected to show significantly stronger growth in the 1990's as a result of successful economic reforms.

Limited capacity to produce wheat, feed protein, and cotton in Southeast Asia will strongly link economic growth and import demand for these commodities. However, the region's greater capacity to produce feed grains, edible oils, and meats should

dampen the growth-trade link for these commodities compared with East Asia. Southeast Asian countries are also expected to maintain competitiveness in Asian and world markets for rice, edible oils, meats, and various tropical products.

Potential for expanding farm output in Southeast Asia is affected by current policies and the level of crop productivity. Some sectors are protected—for example, soybeans and sugar in Thailand and Indonesia and rice in Malaysia—and reforms would tend to increase import demand. Other sectors, often including rice, corn, and meat, are either taxed or given little support by current policies, and policy change would tend to raise domestic prices and output and reduce import demand.

Crop yields in Southeast Asia are relatively low, with potential to rise if policy changes or higher market prices improve producer incentives. Thai rice yields are among the lowest in Asia, and higher market prices or small increases in input use could have a large impact on export supply. In Indonesia and the Philippines, low corn yields could rise in response to higher price incentives or steps to increase use of improved varieties.

Feed-livestock sectors throughout the region are expected to expand rapidly in the 1990's, responding to both domestic and export demand for meat. Increased feed grain demand will be met partially by expanding indigenous supplies of corn, cassava, and other feeds.

While area constraints and rising domestic feed demand are projected to reduce Thailand's corn exports in the 1990's, most Southeast Asian countries have some capacity to boost corn output to help meet demand for energy feeds. However, the capacity to produce quality feed protein is limited, resulting in projected rapid growth in demand for soybeans and soybean meal to support expanding meat production. Thailand is expected to remain a highly competitive exporter of poultry meat, and other Southeast Asian countries, particularly Malaysia and Indonesia, could emerge as meat exporters.

The outlook for food grain demand in Southeast Asia is mixed. Demand for wheat—which is not produced in the region—is projected to be strong in response to increased incomes and urbanization. However, demand for rice, the food staple, is slowing and few countries are likely to expand their imports. Growth in rice exports by Asia's major suppliers, Thailand and Vietnam, is expected to continue expanding.

Southeast Asia led growth in Asian import demand for raw cotton in the 1980's, and demand will likely remain strong in the 1990's. Low processing costs relative to East Asia will continue to fuel rapid growth in textile processing to meet domestic and export demand. Growth, however, is likely to be slower than in the 1980's, in part because of slower expansion of the global economy and continued quota constraints in industrialized importing countries.

**U.S. Shares of Asia's Ag Imports
Are Generally Higher In East Asia**

Commodity	East Asia (Japan, Hong Kong, S. Korea, Taiwan)	Other Asian regions	All Asia
Percent			
Wheat	53.8	42.3	45.7
Coarse grains	65.6	18.4	62.6
Oilseeds	58.0	16.0	53.0
Oilmeal	2.8	8.4	5.2
Cotton	42.5	53.9	46.9
Live animals, meat	36.3	8.1	34.7

Selected major commodities, 1988-90. Bulk products, U.S. share of import volume; live animals and meats, U.S. share of value.

Sources: United Nations Food and Agriculture Organization and U.S. Bureau of the Census.

Special Article

Impacts of Income Growth on the Trade Outlook

Past growth in Asia's farm imports has been driven, in large part, by robust income growth. The income growth rates underlying the USDA projections assume continued strong economic expansion across Asia, generally at slightly slower rates than in the 1980's. However, given the uncertainty about future global and Asian economic trends, it is important to evaluate the potential impacts of alternative rates of growth.

Trade impacts of income growth were estimated by increasing the annual growth rate 1 percent above the base assumption for each country during 1993-2000. Income changes usually have symmetrical impacts, so it is possible also to infer the impact of slower growth. Across the range of commodities, a 1-percent change in annual income growth leads to 2- to 25-percent higher volume of imports in the year 2000.

Overall, Asian corn, beef, and soymeal import demand is relatively responsive to income growth. Higher corn and soymeal imports reflect the impact of income growth on demand for livestock products and the derived demand for feeds. Higher beef imports reflect increased demand in the increasingly liberalized East Asian beef markets. While China's cotton imports are assumed to be responsive to

domestic income growth, import demand elsewhere in Asia is likely more sensitive to incomes and trade policies outside Asia.

Income effects vary considerably across regions and commodities, indicating that growth in import demand will depend partially on the pattern of income growth across the region. Imports of food and feed grains are most sensitive to economic growth in China and South and Southeast Asia. Demand for feeds is particularly sensitive to income growth outside East Asia, although the absolute amounts of additional feed demand are relatively small compared with East Asia. Demand for meats is sensitive primarily to income growth in East Asia (Japan and the NIC's), where policies are more open to meat imports.

The income effects reflect the familiar pattern of food demand across countries at different stages of development. In lower income areas, relatively large shares of additional income go for food. As incomes rise, smaller shares of income are spent on food, but diets include more livestock products, which in turn generate demand for feeds. The results underscore the point that income growth in lower income regions will be a key to future Asian imports of food grains and feeds.

Trade Effects of Additional 1 Percent Annual Growth in Income

Commodity	East Asia	Other Asian regions	All Asia
<i>Percent change</i>			
Wheat	0.4	4.8	3.7
Rice	-2.6	16.5	12.4
Corn	1.6	55.2	6.5
Soybeans	1.8	4.5	2.4
Soymeal	1.5	46.6	25.3
Cotton	0	31.0	13.9
Meats	4.8	0	4.8
<i>Mil. met. tons</i>			
Wheat	0.04	1.52	1.56
Rice	-0.01	0.23	0.22
Corn	0.62	2.06	2.68
Soybeans	0.16	0.11	0.27
Soymeal	0.03	0.96	0.99
Cotton	0	0.35	0.35
Meats	0.20	0	0.20

Change in projected import volume in 2000 resulting from a 1-percent increase in annual income growth rate above the base growth assumption from 1993 to 2000. Selected commodities.

Wheat & Edible Oil Demand To Strengthen in South Asia

South Asia's agricultural imports are projected to grow faster than those of East or Southeast Asia, but remain small relative to the other Asian subregions. South Asia's major economies—India, Pakistan, and Bangladesh—have large populations and, with the exception of Bangladesh, are achieving relatively strong economic growth. However, farm imports remain relatively small because of low per capita incomes and tight balance-of-payments positions that constrain imports of consumer goods. South Asia is projected to be a growing importer of wheat and edible oils, but a growing net exporter of rice, oil-meals, and textiles manufactured from domestically produced cotton.

South Asia's trade outlook hinges on the pace of policy change and investment in farm infrastructure. Most agricultural production in South Asia is taxed rather than subsidized, primarily due to controls on foreign trade aimed at maintaining affordable domestic consumer prices. Over time, policy changes are expected to allow domestic prices to rise gradually, which should reduce imports and raise exports. Improved price incentives and investment climate are expected to maintain strong output growth in the 1990's.

Food grain trade prospects in South Asia are mixed. Improved producer price incentives and crop yields are expected to sustain wheat self-sufficiency in India. But wheat imports are expected to rise in Pakistan—where wheat yields are constrained by double-cropping with cotton—and in Bangladesh, where production capacity is limited.

India is also projected to maintain self-sufficiency in short grain rice, while Indian and Pakistani exports of basmati (long grain, aromatic) rice are expected to strengthen. India is expected to meet growing feed grain demand with domestic supplies, but Pakistan has limited production capacity and is projected to emerge as a feed grain importer during the 1990's.

South Asian edible oil imports are projected to expand more rapidly in the 1990's. India's imports are expected to show stronger growth as import substitution policies are eased, while Pakistan's imports continue to respond to rising incomes. Low-priced Southeast Asian palm oil is likely to maintain a dominant share of South Asian edible oil imports. India's soybean meal exports are expected to maintain strong growth, and to compete with the U.S. and other suppliers in Asian markets.

Pakistan and India achieved rapid growth in production and use of raw cotton in the 1980's. Further strong gains can be expected in the 1990's, although not at the pace of the 1980's. The bulk of increased cotton output will continue to be processed into yarns and textiles in both countries, which will maintain strong growth in yarn and textile exports.

Challenges for U.S. Trade

Strong growth in Asian demand for wheat, coarse grains, soybeans, and meats—all commodities for which Asian markets account for large shares of U.S. exports—should improve U.S. trade performance in the 1990's. However, the outlook also includes important challenges. For the last two decades, Asian import demand has been driven primarily by stable growth in the major East Asian markets. In the 1990's, Asian demand is likely to be more volatile and less predictable for a number of reasons.

Developments in China—which accounts for a large share of the projected increase in net imports—will remain difficult to predict. Also, outside East Asia, both weather- and policy-induced changes in farm output have more potential to destabilize import demand. Thus, differences in agricultural resources and policies will likely prevent the stable expansion of farm import demand observed in East Asia.

An important challenge for U.S. trade in the 1990's is to improve market share, particularly outside East Asia. The U.S. agricultural market share in Asia has remained near 25 percent for the last three decades. U.S. market share has been high in East Asian commodity markets, but fairly low in other regional markets that are expected to account for the bulk of future trade growth.

For two key commodities—wheat and coarse grain—U.S. market shares are often relatively low and unstable outside of East Asia, reflecting both unstable production and the U.S. position as a residual supplier. Market shares for Asian imports of oil-seeds and meal have been reduced by competition from inside and outside Asia. For cotton, however, falling U.S. share in East Asia has been partially offset by improved shares in Southeast Asia.

To the extent that low U.S. market shares have reflected a weakness in the ability to compete on the basis of price, terms, quality, or other factors, U.S. products may not be able to benefit from the anticipated growth in Asian demand. But in some markets, where the current market share is relatively low and demand is expected to grow, untapped opportunities likely exist for expanding U.S. sales. Analyses of several countries identify two general issues in this regard:

- Raising or holding market share may entail aggressive promotion in what are now relatively small markets. Goals would be to ensure quality and other requirements are met, and to identify opportunities to apply U.S. export programs.
- Marketing and trade reforms are ongoing throughout China and South and Southeast Asia. These developments will require attentiveness to changes in trade policy and trading institutions, and to the needs and preferences of buyers within the new policy environment.

Special Article

Passage of a GATT accord or expansion of a regional trade agreement among Asian countries could significantly affect U.S. trade prospects in Asia. Market-oriented multilateral reforms under GATT would likely benefit U.S. farm trade by boosting export opportunities in the major and relatively protected East Asian markets, where U.S. market share is generally high. Elsewhere in Asia, where production is often taxed and consumption subsidized, direct trade may be confined to a few sectors that are now protected, such as Indian oilseeds or Thai and Indonesian soybeans. In areas where production is now taxed, however, exports would likely rise as internal policies adjust to higher world prices and market opportunities, providing more competition for U.S. exports of corn, meats, cotton, and possibly wheat.

A regional trade agreement among Asian countries, perhaps involving broader commodity coverage under the current agreement of the Association of Southeast Asian Nations (ASEAN), could reduce U.S. export opportunities for rice, corn, meats, and other commodities produced by the participating ASEAN countries. Impacts on U.S. trade could be more significant if Japan or other East Asian countries participated, but these countries—and particularly Japan—have shown no substantial interest in such an agreement.

Income growth, shifting consumer preferences and, in some regions, supply constraints, will ensure that Asian farm imports continue expanding in the 1990's—likely at a faster rate than in the 1980's. An Asian regional trade agreement that would significantly affect U.S. trade is not likely, but successful completion of the GATT talks would, on balance, likely drive significant additional growth in U.S. exports to Asia.

[Rip Landes and Mark Giordano (202) 219-0705] **AO**

August Releases from USDA's Agricultural Statistics Board

The following reports are issued at 3 p.m. Eastern time on the dates shown.

August

- 2 Crop Progress (after 4 p.m.)
- 3 Egg Products
Poultry Slaughter
- 4 Broiler Hatchery
- 5 Dairy Products
- 9 Crop Progress (after 4 p.m.)
- 11 Broiler Hatchery
Cotton Ginnings
Crop Production
- 13 Turkey Hatchery
- 16 Crop Progress (after 4 p.m.)
Milk Production
- 17 Cranberries (1 p.m.)
Farm Labor
- 18 Broiler Hatchery
Turkeys
- 19 Mushrooms
- 20 Cattle on Feed
Cold Storage
Livestock Slaughter
- 23 Catfish Processing
Crop Progress (after 4 p.m.)
Eggs, Chickens, & Turkeys
- 24 Hazelnut Production
- 25 Broiler Hatchery
- 27 Peanut Stocks & Processing
- 30 Crop Progress (after 4 p.m.)
- 31 Agricultural Prices
Rice Stocks

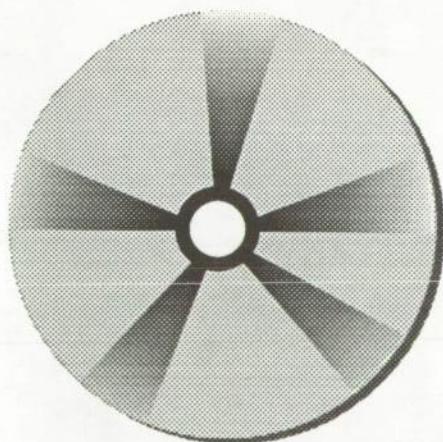
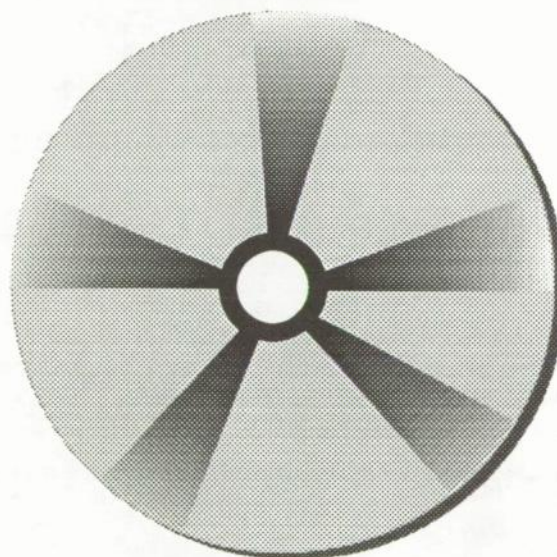
CD-ROM just released!

Electronic Data Products on CD-ROM

New from ERS, this innovative database combines files from 118 ERS electronic data products on a standard CD-ROM disc. Included on the disc are over 6,500 Lotus 1-2-3 worksheet (.WK1) files, ASCII text files describing each data product, and easy-to-use software to locate and download files for use with your favorite analytical package.

Data on the disc cover all aspects of domestic and international agriculture and rural affairs. Worksheet files are included from some of our most popular products: crop yearbooks; dairy and poultry statistics; specialty agriculture; state and national farm income; costs of production; world agriculture trends and indicators; and much, much more!

For a complete listing of products on the CD-ROM, by stock # and title, dial the ERS AutoFAX system at 1-202-219-1107 from your fax machine and ask for document #1019. Or call the CALL-ERS/NASS bulletin board from your computer at 1-800-821-6229 and download the "Data Products Catalog" file.



To order the CD-ROM, call 1-800-999-6779 and ask for *ERS Data Products on CD-ROM*, stock # **93050**. Price is just **\$150** (a savings of 95% over the cost of separate diskettes). Or order from:

ERS-NASS
341 Victory Drive
Herndon, VA 22070

Note: Requires IBM PC or compatible computer, CD-ROM reader, and MS-DOS CD-ROM extensions.

Statistical Indicators

Summary Data

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

	1992				1993				
	II	III	IV	Annual	I	II	III F	IV F	Annual F
Prices received by farmers (1977=100)	141	138	137	140	140	144	—	—	—
Livestock & products	157	159	157	157	162	167	—	—	—
Crops	123	117	117	121	117	120	—	—	—
Prices paid by farmers, (1977=100)									
Production items	174	175	175	174	176	179	—	—	—
Commodities & services, interest, taxes, & wages	191	192	192	191	194	197	—	—	—
Cash receipts (\$ bil.) 1/	172	177	163	169	164	—	—	—	—
Livestock (\$ bil.)	86	85	89	86	86	—	—	—	—
Crops (\$ bil.)	87	92	73	83	78	—	—	—	—
Market basket (1982-84=100)									
Retail cost	138	138	139	138	141	—	—	—	—
Farm value	103	104	104	103	105	—	—	—	—
Spread	157	157	158	157	160	—	—	—	—
Farm value/retail cost (%)	26	26	26	26	26	—	—	—	—
Retail prices (1982-84=100)									
Food	138	138	139	138	140	141	—	—	—
At home	137	137	137	137	139	140	—	—	—
Away from home	140	141	142	141	142	143	—	—	—
Agricultural exports (\$ bil.) 2/	10.1	9.7	11.8	42.4	11.6	10.3	8.8	11.6	42.5
Agricultural imports (\$ bil.) 2/	6.2	6.2	6.1	24.3	6.4	6.5	6.0	6.3	25.0
Commercial production									
Red meat (mil. lb.)	9,915	10,408	10,379	40,795	9,716	10,003	10,652	10,558	40,929
Poultry (mil. lb.)	6,624	6,816	6,644	26,398	6,541	6,925	7,115	6,890	27,471
Eggs (mil. doz.)	1,454	1,464	1,501	5,883	1,458	1,470	1,480	1,510	5,918
Milk (bil. lb.)	39.1	37.5	37.2	151.7	37.8	39.3	37.0	37.1	151.2
Consumption, per capita									
Red meat and poultry (lb.)	51.3	52.7	53.6	208.4	50.5	51.3	53.2	54.1	209.6
Corn beginning stocks (mil. bu.) 3/	6,541.1	4,561.0	2,738.6	—	1,100.3	7,906.4	5,678.2	3,709.4	—
Corn use (mil. bu.) 3/	1,984.5	1,827.8	1,641.6	7,916.1	2,674.1	2,228.8	1,969.8	1,587.4	8,460.0
Prices 4/									
Choice steers—Neb. Direct (\$/cwt)	75.94	73.88	75.86	75.36	80.65	79.78	70-76	71-77	75-79
Barrows & gilts—IA, So. MN (\$/cwt)	45.70	44.39	42.48	43.03	44.92	47.59	43-49	39-45	43-47
Broilers—12-city (cts./lb.)	52.3	54.5	53.3	52.6	53.1	55.8	52-58	49-55	52-56
Eggs—NY gr. A large (cts./doz.)	62.0	64.5	71.4	65.4	75.6	73.4	71-77	72-78	73-77
Milk—all at plant (\$/cwt)	12.87	13.47	13.10	13.09	12.33	12.93	12.20-13.00	12.55-13.55	12.55-12.95
Wheat—KC HRW ordinary (\$/bu.)	3.94	3.45	3.73	3.91	3.82	—	—	—	—
Corn—Chicago (\$/bu.)	2.59	2.26	2.12	2.41	2.18	—	—	—	—
Soybeans—Chicago (\$/bu.)	5.93	5.51	5.52	5.68	5.63	—	—	—	—
Cotton—Avg. spot 41-34 (cts./lb.)	56.4	57.3	50.4	53.9	55.18	—	—	—	—
	1985	1986	1987	1988	1989	1990	1991	1992	1993 F
Farm real estate values 5/									
Nominal (\$ per acre)	713	640	599	632	661	668	681	684	700
Real (1982 \$)	657	568	518	530	533	517	505	487	486

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Sept.-Nov. first quarter; Dec.-Feb. second quarter; Mar.-May third quarter; Jun.-Aug. fourth quarter; Sept.-Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages, Jan.-Dec. 5/ 1990-92 values as of January 1. 1986-89 values as of February 1. 1984-85 values as of April 1. F = forecast, — = not available.

U.S. & Foreign Economic Data

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

	Annual			1992				1993
	1990	1991	1992	I	II	III	IV	I R
\$ billion (quarterly data seasonally adjusted at annual rates)								
Gross domestic product	5,522.2	5,677.5	5,950.7	5,840.2	5,902.2	5,978.5	6,081.8	6,145.8
Gross national product	5,542.9	5,694.9	5,961.9	5,859.8	5,909.3	5,992.0	6,086.8	6,160.5
Personal consumption expenditures	3,748.4	3,887.7	4,095.8	4,022.8	4,057.1	4,108.7	4,194.8	4,234.7
Durable goods	464.3	446.1	480.4	469.4	470.6	482.5	499.1	498.8
Nondurable goods	1,224.5	1,251.5	1,290.7	1,274.1	1,277.5	1,292.8	1,318.6	1,320.8
Clothing & shoes	206.9	209.0	221.8	216.5	217.4	224.3	229.0	225.5
Food & beverages	601.4	617.7	630.9	627.9	623.2	627.3	645.2	644.1
Services	2,059.7	2,190.1	2,324.7	2,279.3	2,309.0	2,333.3	2,377.1	2,416.3
Gross private domestic investment	799.5	721.1	770.4	722.4	773.2	781.6	804.3	844.0
Fixed investment	793.2	731.3	766.0	738.2	765.1	766.6	794.0	809.8
Change in business inventories	6.3	-10.2	4.4	-15.8	8.1	15.0	10.3	34.9
Net exports of goods & services	-68.9	-21.8	-30.4	-8.1	-37.1	-36.0	-40.5	-49.4
Government purchases of goods & services	1,043.2	1,090.5	1,114.9	1,103.1	1,109.1	1,124.2	1,123.3	1,116.6
1987 \$ billion (quarterly data seasonally adjusted at annual rates)								
Gross domestic product	4,877.5	4,821.0	4,922.6	4,873.7	4,892.4	4,933.7	4,990.8	4,999.9
Gross national product	4,895.9	4,836.4	4,932.8	4,890.7	4,899.1	4,945.6	4,995.9	5,012.8
Personal consumption expenditures	3,260.4	3,240.8	3,314.0	3,289.3	3,288.5	3,318.4	3,359.9	3,366.5
Durable goods	439.3	414.7	439.1	432.3	430.0	439.8	454.4	453.5
Nondurable goods	1,056.5	1,042.4	1,054.1	1,049.6	1,045.6	1,052.0	1,069.4	1,062.2
Clothing & shoes	185.9	181.3	188.3	184.1	184.4	190.8	193.7	188.2
Food & beverages	520.8	515.8	518.4	518.9	513.5	514.3	526.7	522.6
Services	1,764.6	1,783.7	1,820.7	1,807.3	1,812.9	1,826.6	1,836.2	1,850.8
Gross private domestic investment	739.1	661.1	712.6	668.9	713.6	724.9	743.1	784.0
Fixed investment	732.9	670.4	707.6	681.4	705.9	710.0	733.3	750.5
Change in business inventories	6.2	-9.3	5.0	-12.6	7.8	15.0	9.8	33.5
Net exports of goods & services	-51.8	-21.8	-41.8	-21.5	-43.9	-52.7	-49.0	-70.3
Government purchases of goods & services	929.9	941.0	937.8	937.0	934.2	943.0	936.8	919.6
GDP implicit price deflator (% change)	4.3	4.1	2.6	3.1	2.7	2.0	2.3	3.3
Disposable personal income (\$ bil.)	4,042.9	4,209.6	4,430.8	4,360.9	4,411.8	4,433.2	4,517.3	4,581.7
Disposable per. income (1987 \$ bil.)	3,516.5	3,509.0	3,585.1	3,565.7	3,576.0	3,580.5	3,618.2	3,642.3
Per capita disposable per. income (\$)	16,174	16,658	17,346	17,143	17,297	17,332	17,610	17,818
Per capita dis. per. income (1987 \$)	14,068	13,886	14,035	14,017	14,021	13,998	14,105	14,165
U.S. population, total, incl. military abroad (mil.)	249.9	252.7	255.5	254.3	255.0	255.7	256.5	257.1
Civilian population (mil.) *	247.8	250.6	253.5	252.3	253.0	253.8	254.6	255.3
	Annual			1992	1993			
	1990	1991	1992	May	Feb	Mar	Apr	May
Monthly data seasonally adjusted								
Industrial production (1987=100)	106.0	104.1	106.5	106.7	109.9	110.1	110.2	110.4
Leading economic indicators (1982=100)	143.8	143.4	148.9	149.2	153.2	151.7	152.0	151.6
Civilian employment (mil. persons)	117.9	116.9	117.6	117.6	118.5	118.6	118.4	119.3
Civilian unemployment rate (%)	5.5	6.7	7.4	7.4	7.0	7.0	7.0	6.9
Personal income (\$ bil. annual rate)	4,664.2	4,828.3	5,058.1	5,032.7	5,229.0	5,260.8	5,266.3	5,296.6
Money stock—M2 (daily avg.) (\$ bil.) 1/	3,345.5	3,445.8	3,497.0	3,467.5	3,475.2	3,472.7	3,474.7	3,506.0
Three-month Treasury bill rate (%)	7.51	5.42	3.45	3.66	2.95	2.97	2.89	2.96
AAA corporate bond yield (Moody's) (%)	9.32	8.77	8.14	8.28	7.71	7.58	7.46	7.43
Housing starts (1,000) 2/	1,193	1,014	1,200	1,197	1,180	1,124	1,215	1,244
Auto sales at retail, total (mil.)	9.5	8.4	8.4	8.4	8.0	8.3	8.9	9.1
Business inventory/sales ratio	1.53	1.55	1.51	1.51	1.46	1.47	1.48	—
Sales of all retail stores (\$bil.) 3/	1,849.8	1,865.5	1,962.4	1,61.3	169.1	167.4	170.0	170.1
Nondurable goods stores (\$ bil.)	1,178.8	1,211.6	1,257.3	103.8	108.1	106.7	107.7	107.3
Food stores (\$ bil.)	369.8	376.9	384.0	31.6	32.9	32.2	32.5	32.4
Eating & drinking places (\$ bil.)	191.0	196.9	201.9	16.7	17.2	17.3	17.4	17.3
Apparel & accessory stores (\$ bil.)	95.8	97.5	105.0	8.6	8.9	8.4	8.7	8.9

1/ Annual data as of December of the year listed. 2/ Private, including farm. 3/ Annual total. R = revised. — = not available.

Note: * Population estimates based on 1990 census.

Information contact: Ann Duncan (202) 219-0313.

Table 3.—Foreign Economic Growth, Inflation, & Exports

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 E	1993 F	1994 F	Average 1983-92
Annual percent change													
World, less U.S.													
Real GDP	2.4	3.6	3.4	3.0	3.5	4.4	3.5	3.0	1.1	1.1	1.2	2.6	2.9
GDP deflator	8.8	8.2	8.6	7.8	9.0	10.6	10.8	23.8	16.1	49.6	38.7	28.0	15.3
Real exports	2.7	9.7	3.8	2.1	5.0	7.0	7.8	6.1	3.0	2.5	4.3	3.8	5.0
Developed less U.S.													
Real GDP	2.1	3.2	3.4	2.7	3.2	4.5	3.6	3.5	1.4	1.0	0.4	2.1	2.9
GDP deflator	6.6	5.2	4.6	4.3	2.9	3.3	4.1	3.2	3.4	4.5	2.9	2.9	4.2
Real exports	3.5	10.8	5.2	-0.2	2.9	6.2	7.9	6.9	3.9	2.6	3.9	3.1	5.0
Eastern Europe & F.S.U.													
Real GDP	3.6	4.0	2.3	3.6	2.6	3.8	1.5	-3.1	-13.3	-13.5	-7.5	-3.1	-0.8
GDP deflator 1/	4.2	5.0	6.4	8.1	12.8	35.3	41.3	192.3	68.9	204.6	89.5	50.6	57.9
Real exports	4.6	6.2	-4.0	9.1	7.6	8.5	-5.3	-6.9	-22.1	-12.0	-2.3	1.8	-1.4
Developing													
Real GDP	3.1	4.7	4.0	3.9	4.5	4.4	3.6	3.2	3.7	4.3	4.9	5.0	4.0
GDP deflator	38.7	37.3	36.4	25.5	33.1	26.4	19.2	16.9	14.4	14.9	15.2	14.0	26.3
Real exports	0.4	7.2	1.7	7.5	11.1	9.4	9.0	5.7	5.5	4.9	6.4	6.1	6.2
Asia													
Real GDP	8.2	7.9	5.9	7.2	8.6	9.1	5.5	5.7	5.0	6.7	6.4	6.3	7.0
GDP deflator	6.3	7.5	5.9	4.4	7.8	8.2	6.1	8.4	7.5	7.9	8.9	7.9	7.0
Real exports	6.4	11.3	2.9	19.0	15.8	14.9	8.2	7.3	9.2	7.5	9.5	9.0	10.2
Latin America													
Real GDP	-2.7	3.7	3.6	4.4	3.0	0.0	1.3	-1.3	2.6	1.3	3.0	3.7	1.6
GDP deflator 1/	30.3	40.8	69.0	62.8	125.5	66.5	35.9	29.6	22.7	24.0	20.8	18.5	50.7
Real exports	2.0	12.0	2.0	0.0	8.0	6.8	10.4	3.9	3.1	4.9	4.3	5.0	5.3
Africa													
Real GDP	1.1	2.2	2.3	1.4	0.6	2.9	2.8	0.9	2.2	1.2	2.8	3.4	1.7
GDP deflator	17.0	13.1	12.2	8.5	25.7	17.4	19.6	15.0	18.0	13.7	18.2	17.8	16.0
Real exports	-5.3	-1.5	3.5	-1.0	0.0	2.9	5.0	8.4	2.0	-0.2	4.7	2.7	1.4
Middle East													
Real GDP	4.5	1.2	1.7	-3.6	-0.1	-0.2	2.5	5.8	2.9	4.9	4.8	4.2	2.0
GDP deflator	-4.5	1.2	3.1	5.7	14.6	9.5	13.5	20.4	2.7	9.6	12.8	11.6	7.6
Real exports	-19.6	-6.7	-7.1	-3.8	24.6	4.8	21.0	6.0	19.1	13.3	4.7	13.4	5.2

1/ Excludes Yugoslavia, Argentina, Brazil, & Peru starting in 1989. E = estimate. F = forecast.

Information contact: Alberto Jerardo, (202) 219-0705.

Farm Prices

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

	Annual			1992		1993					
	1990	1991	1992	June		Jan	Feb	Mar	Apr	May R	June P
1977 = 100											
Prices received											
All farm products	149	145	140	140	139	140	142	146	144	141	
All crops	127	129	121	121	117	118	116	126	120	113	
Food grains	123	115	139	140	136	134	132	130	124	114	
Feed grains & hay	123	117	116	124	107	106	110	113	113	106	
Feed grains	118	115	114	122	102	101	105	107	106	100	
Cotton	107	108	88	96	87	88	92	90	88	88	
Tobacco	152	161	154	141	161	167	167	141	141	141	
Oil-bearing crops	94	91	86	89	89	89	90	91	92	89	
Fruit, all	186	262	181	184	146	136	118	133	142	153	
Fresh market 1/	196	285	185	189	142	130	109	127	137	151	
Commercial vegetables	142	135	155	118	165	177	154	241	182	134	
Fresh market	144	140	157	110	174	195	163	278	197	132	
Potatoes & dry beans	189	141	124	114	133	133	156	175	177	161	
Livestock & products	170	161	157	158	159	162	166	167	168	167	
Meat animals	193	186	176	178	181	187	192	191	192	180	
Dairy products	141	126	135	136	129	127	126	130	134	136	
Poultry & eggs	131	124	117	115	122	121	130	131	130	129	
Prices paid											
Commodities & services,											
interest, taxes, & wage rates	184	189	191	191	194	194	194	197	197	197	
Production items	171	174	174	176	176	176	176	179	179	179	
Feed	128	123	123	—	122	—	—	124	—	—	
Feeder livestock	213	214	202	—	216	—	—	221	—	—	
Seed	165	163	162	—	162	—	—	169	—	—	
Fertilizer	131	134	131	—	128	—	—	129	—	—	
Agricultural chemicals	139	151	159	—	161	—	—	166	—	—	
Fuels & energy	204	203	199	—	198	—	—	199	—	—	
Farm & motor supplies	154	157	160	—	161	—	—	159	—	—	
Autos & trucks	231	244	258	—	265	—	—	272	—	—	
Tractors & self-propelled machinery	202	211	219	—	224	—	—	223	—	—	
Other machinery	216	226	233	—	235	—	—	245	—	—	
Building & fencing	144	146	150	—	152	—	—	162	—	—	
Farm services & cash rent	166	171	172	—	172	—	—	172	—	—	
Int. payable per acre on farm real estate debt	177	169	167	—	164	—	—	164	—	—	
Taxes payable per acre on farm real estate	158	164	171	—	178	—	—	178	—	—	
Wage rates (seasonally adjusted)	191	200	209	—	217	—	—	217	—	—	
Production items, interest, taxes, & wage rates	172	175	176	—	178	—	—	181	—	—	
Ratio, prices received to prices paid (%) 2/	81	77	73	73	72	73	73	74	73	72	
Prices received (1910-14=100)	681	665	637	639	634	640	647	669	660	642	
Prices paid, etc. (parity index) (1910-14=100)	1,267	1,298	1,317	—	1,337	—	—	1,355	—	—	
Parity ratio (1910-14=100) (%)2/	54	51	49	—	47	—	—	49	—	—	

1/ Fresh market for noncitrus; fresh market & processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January, April, July, & October. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

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

	Annual 1/			1992						
	1990	1991	1992	June	Jan	Feb	Mar	Apr	May R	June P
CROPS										
All wheat (\$/bu.)	2.61	3.00	3.24	3.43	3.37	3.33	3.30	3.25	3.10	2.82
Rice, rough (\$/cwt)	6.70	7.58	5.95	6.97	6.36	6.06	5.64	5.52	5.24	5.23
Corn (\$/bu.)	2.28	2.37	2.05	2.47	2.03	2.00	2.10	2.16	2.13	2.00
Sorghum (\$/cwt)	3.79	4.01	3.30	4.22	3.38	3.32	3.38	3.38	3.34	3.39
All hay, baled (\$/ton)	80.60	71.20	73.20	74.50	75.10	77.70	78.90	83.80	86.30	80.50
Soybeans (\$/bu.)	5.74	5.58	5.50	5.94	5.58	5.56	5.65	5.73	5.81	5.64
Cotton, upland (cts./lb.)	67.1	56.8	—	58.0	52.7	52.9	55.5	54.3	53.2	53.1
Potatoes (\$/cwt)	6.08	4.96	5.28	4.66	5.24	5.25	6.41	7.47	7.63	6.86
Lettuce (\$/cwt) 2/	11.50	11.40	12.40	9.85	10.90	19.00	14.70	37.50	12.50	9.48
Tomatoes fresh (\$/cwt) 2/	27.30	31.80	36.20	21.80	38.30	21.80	21.20	45.20	58.50	36.70
Onions (\$/cwt)	10.50	12.50	12.80	10.00	17.00	14.10	17.00	31.70	24.10	10.40
Dry edible beans (\$/cwt)	18.50	15.60	20.70	15.10	21.10	20.80	20.10	18.10	17.70	17.50
Apples for fresh use (cts./lb.)	20.9	25.1	19.2	25.0	19.2	17.8	15.2	14.7	15.3	16.1
Pears for fresh use (\$/ton)	360.00	385.00	378.00	—	362.00	393.00	399.00	429.00	476.00	646.00
Oranges, all uses (\$/box) 3/	6.13	6.78	5.79	4.58	2.66	2.39	2.11	3.23	3.65	3.89
Grapefruit, all uses (\$/box) 3/	5.86	5.55	6.25	4.73	3.00	2.42	1.48	2.13	1.62	0.98
LIVESTOCK										
Beef cattle (\$/cwt)	74.80	72.90	71.38	70.20	74.20	75.80	77.30	77.40	76.90	75.50
Calves (\$/cwt)	96.50	99.90	89.65	88.50	93.20	95.90	98.20	99.80	100.00	99.00
Hogs (\$/cwt)	54.00	48.80	41.88	46.70	41.40	44.20	46.80	45.50	47.00	48.30
Lambs (\$/cwt)	56.00	52.50	60.76	65.60	67.00	72.70	76.30	68.50	61.80	56.40
All milk, sold to plants (\$/cwt)	13.74	12.27	13.15	13.20	12.50	12.30	12.20	12.60	13.00	13.20
Milk, manuf. grade (\$/cwt)	12.34	11.05	11.91	12.20	11.10	10.90	11.10	12.00	12.40	12.30
Broilers (cts./lb.)	32.4	31.0	30.8	31.9	31.5	31.8	32.4	33.2	35.7	34.4
Eggs (cts./doz.) 4/	70.4	66.2	57.7	53.0	63.7	61.5	70.7	69.3	62.9	66.4
Turkeys (cts./lb.) 5/	38.4	37.7	38.0	37.7	35.9	34.8	37.2	37.7	38.4	37.3
Wool (cts./lb.) 5/	80.0	55.0	74.0	81.0	43.3	43.7	45.5	45.5	55.0	55.1

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 & eggs sold at retail. 5/ Average local market price, excluding incentive payments.
 P = preliminary. R = revised. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1992			1993					
	1992	June	Nov	Dec	Jan	Feb	Mar	Apr	May	June
					1982-84=100					
Consumer Price Index, all items	140.3	140.2	142.0	141.9	142.6	143.1	143.6	144.0	144.2	144.4
Consumer Price Index, less food	140.8	140.7	142.7	142.5	143.1	143.7	144.2	144.6	144.8	145.1
All food	137.9	137.4	138.3	138.7	139.8	139.9	140.1	140.6	141.1	140.4
Food away from home	140.7	140.7	141.5	141.6	142.0	142.2	142.4	142.7	142.9	143.2
Food at home	136.8	136.1	137.0	137.5	139.1	139.1	139.4	140.0	140.7	139.3
Meats 1/	130.7	131.0	131.2	131.1	132.3	132.1	133.1	133.8	134.7	134.9
Beef & veal	132.3	132.7	132.9	132.8	135.1	135.6	136.3	137.6	138.2	137.6
Pork	127.8	127.9	127.9	127.4	127.9	127.2	129.0	128.5	130.5	132.1
Poultry	131.4	130.7	133.6	133.7	134.6	133.1	135.7	135.2	136.6	136.5
Fish	151.7	149.1	151.2	152.0	157.2	157.5	157.8	159.7	154.7	154.8
Eggs	108.3	100.7	113.4	117.7	116.2	115.6	120.3	126.9	114.9	116.4
Dairy products 2/	128.5	127.8	129.4	129.1	129.5	128.8	128.8	128.0	128.0	129.8
Fats & oils 3/	129.8	130.2	128.5	128.4	130.2	130.7	130.2	130.2	129.4	130.1
Fresh fruit	184.2	182.9	181.4	181.8	191.0	187.0	184.4	184.6	188.0	176.1
Processed fruit	137.7	138.3	135.5	134.8	133.3	134.5	132.0	132.1	130.7	129.7
Fresh vegetables	157.9	146.9	158.4	166.1	172.4	171.1	173.7	179.3	189.6	167.1
Potatoes	141.5	141.0	136.0	137.2	139.7	138.9	142.4	152.0	156.0	163.4
Processed vegetables	128.8	129.0	127.7	127.3	129.8	128.9	130.2	130.4	129.9	130.9
Cereals & bakery products	151.5	151.6	152.7	153.3	153.4	154.9	154.6	155.4	156.3	156.7
Sugar & sweets	133.1	133.3	133.0	132.1	133.1	133.3	132.8	133.2	133.4	133.1
Beverages, nonalcoholic	114.3	115.0	112.4	112.3	113.5	115.1	114.8	114.2	115.0	114.6
Apparel										
Apparel, commodities less footwear	130.2	129.0	133.1	129.4	127.3	131.9	135.2	135.9	133.4	129.7
Footwear	125.0	125.4	126.0	125.1	124.4	125.2	126.3	127.1	127.8	125.6
Tobacco & smoking products	219.8	219.2	225.0	228.9	234.6	235.6	236.3	237.3	237.9	236.2
Beverages, alcoholic	147.3	147.5	148.2	148.1	148.7	149.1	149.4	149.7	149.5	149.6

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ann Duncan (202) 219-0313.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1992		1993				
	1990	1991	1992	May	Dec	Jan R	Feb	Mar	Apr	May
	1982 = 100									
All commodities	116.3	116.5	117.2	117.2	117.6	118.0	118.2	118.7	119.2	119.7
Finished goods 1/	119.2	121.7	123.2	123.2	123.8	124.2	124.3	124.6	125.3	125.7
All foods 2/	123.2	122.2	120.8	120.7	122.1	121.9	121.5	122.4	124.2	124.8
Consumer foods	124.4	124.1	123.2	123.1	124.2	124.3	124.0	124.6	126.3	126.7
Fresh fruit & melons	118.1	129.9	83.8	87.4	85.0	80.0	77.7	73.5	73.3	89.9
Fresh & dried vegetables	118.1	103.8	115.0	98.8	134.1	132.1	136.9	132.3	174.0	163.7
Dried fruit	106.7	111.8	114.4	115.1	115.1	116.3	115.7	115.7	115.8	115.9
Canned fruit & juice	127.0	128.6	134.5	136.7	129.8	128.0	128.3	125.8	124.5	124.3
Frozen fruit & juice	139.0	116.3	125.8	130.1	113.1	108.6	106.1	105.3	104.6	105.8
Fresh veg. excl. potatoes	107.8	100.2	116.4	89.9	133.4	128.8	125.8	117.2	178.5	163.5
Canned veg. & juices	116.7	112.9	109.6	109.8	109.8	110.1	110.2	109.3	108.7	108.8
Frozen vegetables	118.4	117.6	116.4	116.3	118.1	118.0	118.2	118.1	118.6	119.9
Potatoes	157.3	125.7	118.3	104.7	108.3	120.2	119.1	131.3	144.0	142.3
Eggs for fresh use (1991=100)	3/	3/	78.6	71.9	89.9	87.1	87.9	99.0	91.9	82.9
Bakery products	141.0	146.6	152.5	152.7	154.5	155.0	155.7	155.4	156.0	155.9
Meats	117.0	113.5	106.7	108.9	108.1	108.9	108.5	110.6	113.0	113.9
Beef & veal	116.0	112.2	109.7	112.1	113.2	114.3	114.0	115.8	117.3	119.2
Pork	119.8	113.4	98.5	101.4	97.9	98.6	97.7	101.0	106.4	106.3
Processed poultry	113.6	109.9	109.1	109.7	109.1	108.5	108.5	109.4	110.0	111.4
Fish	147.2	149.5	153.0	154.1	163.0	163.5	149.8	168.6	160.6	159.0
Dairy products	117.2	114.6	118.0	116.9	117.4	116.4	115.2	114.9	116.9	118.4
Processed fruits & vegetables	124.7	119.6	120.8	122.0	118.4	117.5	117.4	116.4	115.9	116.3
Shortening & cooking oil	123.2	116.5	114.9	116.1	119.0	119.4	116.5	117.9	120.6	119.8
Soft drinks	122.3	125.5	125.7	125.9	125.7	126.9	127.5	127.5	127.4	126.3
Consumer finished goods less foods	115.3	118.7	120.8	120.9	121.1	121.4	121.8	122.1	122.6	123.2
Beverages, alcoholic	117.2	123.7	126.1	126.7	125.7	125.8	125.6	126.3	126.0	126.4
Apparel	117.5	119.6	122.2	121.8	122.9	123.2	123.3	123.3	123.2	123.2
Footwear	125.6	128.6	131.9	131.6	133.3	133.5	133.8	134.1	134.1	134.2
Tobacco products	221.4	249.7	275.3	283.2	285.1	291.8	292.2	292.2	296.0	296.7
Intermediate materials 4/	114.5	114.4	114.7	114.5	114.8	115.2	115.5	115.9	116.2	116.2
Materials for food manufacturing	117.9	115.3	113.9	114.8	113.3	113.3	112.6	113.2	114.6	115.7
Flour	103.6	96.8	109.3	111.3	105.5	109.6	110.0	109.2	110.4	107.4
Refined sugar 5/	122.7	121.6	120.0	119.9	119.0	118.0	118.5	118.3	118.7	118.5
Crude vegetable oils	115.8	103.0	97.1	101.6	101.1	104.1	101.2	102.8	104.1	104.1
Crude materials 6/	108.9	101.2	100.3	101.2	100.9	101.4	101.1	102.6	103.6	106.3
Foodstuffs & feedstuffs	113.1	105.5	105.1	108.4	104.6	105.6	105.6	108.2	110.1	112.1
Fruits & vegetables & nuts 7/	117.5	114.7	96.8	91.3	106.3	103.7	104.8	101.3	118.0	120.3
Grains	97.4	92.0	97.3	103.5	89.2	89.9	88.1	89.3	93.7	91.1
Livestock	115.6	107.9	104.7	108.0	106.3	108.3	110.0	112.6	113.0	112.8
Poultry, live	118.8	111.2	112.6	116.1	108.8	112.0	110.4	116.1	116.5	132.3
Fibers, plant & animal	117.8	115.1	89.8	93.4	87.3	89.5	89.5	94.2	91.5	93.3
Fluid milk	100.8	89.5	96.3	95.3	92.4	91.0	89.1	88.7	90.8	95.0
Oilseeds	112.1	106.4	107.5	113.6	107.1	108.9	106.7	108.3	112.2	114.2
Tobacco, leaf	95.8	101.1	101.0	94.4	106.1	104.8	110.0	108.7	97.6	91.8
Sugar, raw cane	119.2	113.7	112.1	111.4	111.1	109.6	109.5	112.1	113.9	111.1

1/ Commodities ready for sale to ultimate consumer. 2/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). 3/ New index beginning Dec. 1991. 4/ Commodities requiring further processing to become finished goods. 5/ All types & sizes of refined sugar. 6/ Products entering market for the first time that have not been manufactured at that point. 7/ Fresh & dried. R = revised.

Information contact: Ann Duncan (202) 219-0313.

Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual			1992		1993				
	1990	1991	1992	May	Dec	Jan	Feb	Mar	Apr	May
Market basket 1/										
Retail cost (1982-84=100)	133.5	137.4	138.4	137.8	139.5	141.0	140.6	141.0	141.7	142.6
Farm value (1982-84=100)	113.1	106.1	103.4	102.1	103.6	104.1	104.0	106.4	108.8	109.0
Farm-retail spread (1982-84=100)	144.5	154.2	157.3	156.9	158.9	160.8	160.4	159.6	159.3	160.7
Farm value-retail cost (%)	29.7	27.0	26.2	26.0	26.0	25.9	25.9	26.4	26.9	26.8
Meat products										
Retail cost (1982-84=100)	128.5	132.5	130.7	130.3	131.1	132.3	132.1	133.1	133.8	134.7
Farm value (1982-84=100)	116.8	110.0	104.5	107.5	105.5	107.1	109.5	113.7	115.7	113.6
Farm-retail spread (1982-84=100)	140.4	155.6	157.5	153.7	157.4	158.2	155.3	153.0	152.4	156.4
Farm value-retail cost (%)	46.0	42.0	40.5	41.8	40.8	41.0	42.0	43.3	43.8	42.7
Dairy products										
Retail cost (1982-84=100)	126.5	125.1	128.5	127.0	129.1	129.5	128.8	128.8	128.0	128.0
Farm value (1982-84=100)	101.7	90.0	95.9	93.9	94.5	92.6	90.0	89.4	89.1	91.2
Farm-retail spread (1982-84=100)	149.5	157.5	158.6	157.5	161.0	163.5	164.6	165.1	163.9	161.9
Farm value-retail cost (%)	38.5	34.5	35.8	35.5	35.1	34.3	33.5	33.3	33.4	34.2
Poultry										
Retail cost (1982-84=100)	132.5	131.5	131.4	129.1	133.7	134.6	133.1	135.7	135.2	136.6
Farm value (1982-84=100)	107.6	102.5	104.0	104.1	103.8	102.7	103.0	105.8	108.2	115.4
Farm-retail spread (1982-84=100)	161.1	164.9	163.0	157.9	168.1	171.3	167.7	170.1	166.3	161.1
Farm value-retail cost (%)	43.5	41.7	42.4	43.2	41.6	40.9	41.4	41.7	42.8	45.2
Eggs										
Retail cost (1982-84=100)	124.1	121.2	108.3	104.2	117.7	116.2	115.6	120.3	126.9	114.9
Farm value (1982-84=100)	108.0	100.9	77.8	67.0	95.4	92.6	88.3	105.9	98.1	83.5
Farm-retail spread (1982-84=100)	153.2	157.6	163.2	171.0	157.8	158.6	164.6	146.2	178.6	171.3
Farm value-retail cost (%)	55.9	53.5	46.1	41.3	52.1	51.2	49.1	56.5	49.7	46.7
Cereal & bakery products										
Retail cost (1982-84=100)	140.0	145.8	151.5	150.7	153.3	153.4	154.9	154.6	155.4	156.3
Farm value (1982-84=100)	90.5	85.3	94.7	99.6	91.2	91.6	91.2	90.9	91.2	87.4
Farm-retail spread (1982-84=100)	146.9	154.3	159.4	157.8	162.0	162.0	163.8	163.5	164.4	165.9
Farm value-retail cost (%)	7.9	7.2	7.7	8.1	7.3	7.3	7.2	7.2	7.2	6.8
Fresh fruits										
Retail cost (1982-84=100)	174.6	200.1	189.6	197.2	189.6	199.0	191.6	188.5	188.5	193.1
Farm value (1982-84=100)	128.3	174.4	122.5	118.3	127.1	132.6	132.2	132.2	132.5	132.8
Farm-retail spread (1982-84=100)	195.9	211.9	220.6	233.6	218.4	229.6	219.0	214.5	214.4	220.9
Farm value-retail cost (%)	23.2	27.5	20.4	19.0	21.2	21.0	21.8	22.2	22.2	21.7
Fresh vegetables										
Retail costs (1982-84=100)	151.1	154.4	157.9	149.6	166.1	172.4	171.1	173.7	179.3	189.6
Farm value (1982-84=100)	124.4	110.8	120.5	90.7	126.1	132.6	129.7	129.4	163.6	176.5
Farm-retail spread (1982-84=100)	164.9	176.8	177.2	179.9	186.6	192.9	192.4	196.5	187.4	196.3
Farm value-retail cost (%)	28.0	24.4	25.9	20.6	25.8	26.1	25.7	25.3	31.0	31.6
Processed fruits & vegetables										
Retail cost (1982-84=100)	132.7	130.2	133.7	135.0	131.4	131.6	131.9	131.1	131.2	130.2
Farm value (1982-84=100)	144.0	120.6	129.0	132.0	111.2	109.2	106.7	105.9	103.6	103.2
Farm-retail spread (1982-84=100)	129.1	133.2	135.2	135.9	137.7	138.6	139.8	139.0	139.8	138.6
Farm value-retail cost (%)	25.8	22.0	22.9	23.2	20.1	19.7	19.2	19.2	18.8	18.9
Fats & oils										
Retail cost (1982-84=100)	126.3	131.7	129.8	130.4	128.4	130.2	130.7	130.2	130.2	129.4
Farm value (1982-84=100)	107.1	98.0	93.2	96.9	98.2	102.0	99.7	98.4	101.0	101.1
Farm-retail spread (1982-84=100)	133.4	144.2	143.3	142.7	139.5	140.6	142.1	141.9	141.0	139.8
Farm value-retail cost (%)	22.8	20.0	19.3	20.0	20.6	21.1	20.5	20.3	20.9	21.0
	Annual			1992		1993				
	1990	1991	1992	June	Jan	Feb	Mar	Apr	May	June
Beef, Choice										
Retail price 2/ (cts./lb.)	281.0	288.3	284.6	287.1	288.4	292.5	295.5	299.1	304.2	298.0
Wholesale value 3/ (cts.)	189.6	182.5	179.6	180.8	188.5	187.8	191.7	193.5	195.3	185.2
Net farm value 4/ (cts.)	168.4	160.2	161.8	159.4	170.2	172.7	178.7	177.2	175.5	165.8
Farm-retail spread (cts.)	112.6	128.1	122.8	127.7	118.2	119.8	116.8	121.9	128.7	132.2
Wholesale-retail 5/ (cts.)	91.4	105.8	105.0	106.3	99.9	104.7	103.8	105.6	108.9	112.8
Farm-wholesale 6/ (cts.)	21.2	22.3	17.8	21.4	18.3	15.1	13.0	16.3	19.8	19.4
Farm value-retail price (%)	60	56	57	56	59	59	60	59	58	56
Pork										
Retail price 2/ (cts./lb.)	212.6	211.9	198.0	197.1	196.0	193.9	193.9	191.4	194.8	196.5
Wholesale value 3/ (cts.)	118.3	108.9	98.9	104.8	95.0	99.0	102.6	102.3	102.6	106.3
Net farm value 4/ (cts.)	87.2	78.4	67.8	76.1	66.0	70.8	74.6	71.9	74.9	77.0
Farm-retail spread (cts.)	125.4	133.5	130.2	121.0	130.0	123.1	119.3	119.5	119.9	119.5
Wholesale-retail 5/ (cts.)	94.3	103.0	99.1	92.3	101.0	94.9	91.3	89.1	92.2	90.2
Farm-wholesale 6/ (cts.)	31.1	30.5	31.1	28.7	29.0	28.2	28.0	30.4	27.7	29.3
Farm value-retail price (%)	41	37	34	39	34	37	38	38	38	39

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef. Prices from BLS. 3/ Value of wholesale (boxed beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs & byproduct values. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as wholesaling, & in-city transportation. 6/ Charges for livestock marketing, processing, & transportation.

Information contacts: Denis Dunham (202) 219-0870, Larry Duewer (202) 219-0712.

Table 9.—Price Indexes of Food Marketing Costs

(See the June 1993 issue.)

Information contact: Denis Dunham (202) 219-0870.

Livestock & Products

Table 10.—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion 1/	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price 3/
							Total	Per capita 2/	
				Million pounds 4/			Pounds		
Beef									
1990	335	22,743	2,356	25,434	1,006	397	24,031	67.8	78.55
1991	397	22,917	2,406	25,720	1,188	419	24,113	66.8	74.28
1992	419	23,086	2,440	25,945	1,324	360	24,261	66.5	75.36
1993 F	360	23,126	2,335	25,821	1,300	350	24,171	65.6	75-79
Pork									
1990	313	15,354	898	16,565	238	296	16,031	49.8	55.32
1991	296	15,999	775	17,070	283	388	16,399	50.4	49.69
1992	388	17,234	645	18,267	407	385	17,475	53.1	43.03
1993 F	385	17,356	680	18,421	410	385	17,626	53.0	43-47
Veal 5/									
1990	4	327	0	331	0	6	325	1.1	96.51
1991	6	306	0	312	0	7	305	1.0	99.94
1992	7	310	0	317	0	5	312	1.0	89.38
1993 F	5	287	0	292	0	5	287	0.9	90-94
Lamb & mutton									
1990	8	363	41	412	6	8	397	1.4	55.54
1991	8	363	41	412	10	6	396	1.4	53.21
1992	6	348	50	404	8	8	388	1.4	61.00
1993 F	8	343	50	401	8	8	385	1.3	62-66
Total red meat									
1990	660	38,787	3,295	42,742	1,250	707	40,784	120.0	—
1991	707	39,585	3,223	43,515	1,481	820	41,214	119.6	—
1992	820	40,978	3,135	44,933	1,739	758	42,436	122.0	—
1993 F	758	41,112	3,065	44,935	1,718	748	42,469	120.8	—
Broilers									
1990	38	18,430	0	18,468	1,143	26	17,299	61.0	54.8
1991	26	19,591	0	19,617	1,261	36	18,320	63.7	52.0
1992	36	20,907	0	20,943	1,489	33	19,421	66.8	52.6
1993 F	33	21,912	0	21,945	1,630	33	20,282	69.1	52-56
Mature chicken									
1990	189	523	0	713	25	224	464	1.9	—
1991	224	508	0	732	28	274	429	1.7	—
1992	274	519	0	793	41	345	407	1.6	—
1993 F	345	509	0	854	52	340	462	1.8	—
Turkeys									
1990	236	4,514	0	4,750	54	306	4,390	17.6	63.2
1991	306	4,603	0	4,909	103	264	4,541	18.0	61.3
1992	264	4,778	0	5,042	171	272	4,599	18.0	59.9
1993 F	272	4,848	0	5,119	187	260	4,672	18.1	58-62
Total poultry									
1990	463	23,468	0	23,931	1,222	557	22,152	80.5	—
1991	557	24,701	0	25,258	1,392	575	23,291	83.4	—
1992	575	26,203	0	26,778	1,701	650	24,428	86.4	—
1993 F	650	27,269	0	27,918	1,869	623	25,416	89.0	—
Red meat & poultry									
1990	1,123	62,255	3,295	66,673	2,473	1,264	62,937	200.5	—
1991	1,264	64,286	3,223	68,772	2,873	1,395	64,504	202.9	—
1992	1,395	67,181	3,135	71,711	3,440	1,408	66,864	208.4	—
1993 F	1,408	68,381	3,065	72,853	3,587	1,381	67,885	209.8	—

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was 70.5). 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Medium # 1, Nebraska Direct 1,100-1,300 lb.; pork: barrows & gilts, Iowa, Southern Minnesota; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. F = forecast. — = not available.

Information contacts: Polly Cochran or Maxine Davis (202) 219-0767.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Pro- duc- tion	Im- ports	Total supply	Ex- ports	Hatch- ing use	Ending stocks	Consumption		Wholesale price*
								Total	Per capita	
								Million dozen		
1987	10.4	5,868.2	5.6	5,884.2	111.2	599.1	14.4	5,159.5	254.9	61.6
1988	14.4	5,784.2	5.3	5,803.9	141.8	605.9	15.2	5,041.0	246.9	62.1
1989	15.2	5,598.2	25.2	5,638.5	91.6	643.9	10.7	4,892.4	237.3	81.9
1990	10.7	5,665.6	9.1	5,685.3	100.5	678.5	11.6	4,894.7	235.0	82.2
1991	11.6	5,779.3	2.3	5,793.3	154.3	708.1	13.0	4,917.9	233.5	77.5
1992	13.0	5,882.7	4.3	5,899.9	157.0	726.6	13.5	5,002.8	235.0	65.4
1993 F	13.5	5,917.9	5.0	5,936.4	154.0	757.3	12.0	5,013.1	233.1	73-77

* Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 219-0767.

Table 12.—U.S. Milk Supply & Use^{1/}

	Production	Farm use	Commercial		Imports	Total commercial supply	CCC net removals	Commercial		All milk price 1/	CCC net removals		
			Farm market-ings	Beg. stock				Ending stocks	Disap-pear-ance		Skim solids basis	Total solids basis 2/	
Billion pounds (milkfat basis)											\$/cwt	Billion pounds	
1985	143.0	2.5	140.6	4.8	2.8	148.2	13.3	4.5	130.4	12.76	17.2	15.6	
1986	143.1	2.4	140.7	4.5	2.7	147.9	10.8	4.1	133.0	12.51	14.3	12.9	
1987	142.7	2.3	140.5	4.1	2.5	147.1	6.8	4.6	135.7	12.54	9.3	8.3	
1988	145.2	2.2	142.9	4.6	2.4	149.9	9.1	4.3	136.5	12.26	5.5	6.9	
1989	144.2	2.1	142.2	4.3	2.5	149.0	9.4	4.1	135.4	13.56	0.4	4.0	
1990	148.3	2.0	146.3	4.1	2.7	153.1	9.0	5.1	138.9	13.68	1.6	4.6	
1991	148.5	2.0	146.5	5.1	2.6	154.3	10.4	4.5	139.4	12.24	3.9	6.5	
1992	151.7	2.0	149.7	4.5	2.5	156.7	10.0	4.7	142.0	13.09	2.4	5.4	
1993 F	151.2	2.0	149.3	4.7	2.6	156.6	7.7	4.5	144.4	12.73	4.5	5.8	

^{1/} Delivered to plants & dealers; does not reflect deductions. ^{2/} Arbitrarily weighted average of milkfat basis (40 percent) & skim solids basis (60 percent). F = forecast.

Information contact: Jim Miller (202) 219-0770.

Table 13.—Poultry & Eggs

	Annual			1992		1993				
	1990	1991	1992	May	Dec	Jan	Feb	Mar	Apr	May
Broilers										
Federally inspected slaughter, certified (mil. lb.)	18,555.0	19,727.7	21,052.4	1,740.3	1,817.8	1,802.8	1,659.6	1,897.1	1,867.2	1,783.9
Wholesale price, 12-city (cts./lb.)	54.8	52.0	52.6	55.1	51.2	52.1	53.0	54.0	54.7	57.7
Price of grower feed (\$/ton)	218	208	208	217	202	203	205	209	208	210
Broiler-feed price ratio 1/	3.0	3.0	3.1	3.0	3.1	3.1	3.1	3.1	3.2	3.4
Stocks beginning of period (mil. lb.)	38.3	26.1	36.1	35.4	29.0	32.8	31.6	32.7	29.0	32.6
Broiler-type chicks hatched (mil.) 2/	6,324.4	6,616.5	6,830.9	598.0	588.3	587.9	536.4	611.9	590.4	624.3
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	4,560.7	4,651.9	4,828.9	374.2	393.1	354.1	322.3	383.3	391.9	378.7
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts./lb.)	63.2	61.2	60.2	60.0	65.1	58.1	56.8	58.4	59.0	58.8
Price of turkey grower feed (\$/ton)	238	230	242	243	246	243	240	240	251	248
Turkey-feed price ratio 1/	3.2	3.3	3.1	3.1	3.2	3.0	2.9	3.1	3.0	3.1
Stocks beginning of period (mil. lb.)	235.9	306.4	264.1	430.2	320.5	271.7	314.7	359.8	359.2	424.4
Poultz placed in U.S. (mil.)	304.9	308.1	307.8	28.5	24.0	24.7	25.3	27.3	27.9	27.1
Eggs										
Farm production (mil.)	67,987	69,352	70,592	5,919	6,099	6,020	5,421	6,054	5,850	5,998
Average number of layers (mil.)	270	275	278	276	281	282	282	282	281	280
Rate of lay (eggs per layer on farms)	251.7	252.4	253.9	21.4	21.7	21.3	19.2	21.5	20.8	21.4
Cartoned price, New York, grade A large (cts./doz.) 3/	82.2	77.5	65.4	58.9	73.6	71.7	69.9	85.2	77.8	67.6
Price of laying feed (\$/ton)	200	192	199	197	195	198	198	199	201	200
Egg-feed price ratio 1/	7.0	6.8	5.7	5.2	6.6	6.4	6.2	7.1	6.9	6.3
Stocks, first of month										
Shell (mil. doz.)	0.36	0.45	0.63	0.81	0.45	0.45	0.36	0.36	0.45	0.18
Frozen (mil. doz.)	10.3	11.2	12.3	14.3	14.2	13.0	12.7	12.9	11.4	10.9
Replacement chicks hatched (mil.)	398	420	386	38.5	29.5	33.4	33.7	37.3	37.2	37.1

^{1/} Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. ^{2/} Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. ^{3/} Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 219-0767.

Table 14.—Dairy

	Annual			1992		1993				
	1990	1991	1992	May	Dec	Jan	Feb	Mar	Apr	May
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	12.21	11.05	11.88	12.06	11.34	10.89	10.74	11.02	12.15	12.52
Wholesale prices										
Butter, grade A Chi. (cts./lb.)	102.1	99.3	82.5	83.8	78.6	75.3	75.3	75.3	75.3	75.3
Am. cheese, Wis. assembly pt. (cts./lb.)	136.7	124.4	131.9	139.9	123.2	119.3	118.6	124.3	140.8	141.8
Nonfat dry milk (cts./lb.) 2/	100.6	94.0	107.1	110.2	109.2	111.0	113.8	113.3	113.9	115.3
USDA net removals 3/										
Total milk equiv. (mil. lb.) 4/	9,017.2	10,425.0	9,997.8	1,232.9	605.3	1,638.0	1,548.7	1,142.5	815.6	1,157.3
Butter (mil. lb.)	400.3	440.4	440.4	55.0	24.6	73.3	67.4	49.5	35.7	51.3
Am. cheese (mil. lb.)	21.5	76.8	16.1	0.0	0.9	1.9	3.1	2.3	0.2	0.6
Nonfat dry milk (mil. lb.)	117.8	269.5	143.2	17.0	36.1	52.4	49.1	23.2	21.4	20.8
Milk										
Milk prod. 21 States (mil. lb.)	125,772	125,671	128,300	11,280	10,659	10,760	9,965	11,087	10,956	11,404
Milk per cow (lb.)	14,778	14,977	15,546	1,367	1,292	1,310	1,216	1,356	1,344	1,400
Number of milk cows (1,000)	8,512	8,391	8,253	8,250	8,247	8,215	8,196	8,178	8,153	8,144
U.S. milk production (mil. lb.)	148,314	148,477	151,747	13,346	12,626	8/ 12,773	8/ 11,830	8/ 13,161	8/ 12,962	8/ 13,493
Stocks, beginning										
Total (mil. lb.)	9,036	13,359	15,841	19,549	14,826	14,215	15,410	15,396	16,328	17,252
Commercial (mil. lb.)	4,120	5,146	4,461	4,713	4,603	4,688	4,817	4,565	4,597	4,517
Government (mil. lb.)	4,916	8,213	11,379	14,836	10,223	9,526	10,593	10,831	11,731	12,735
Imports, total (mil. lb.)	2,690	2,625	2,520	216	323	171	135	243	260	---
Commercial disappearance (mil. lb.)	138,922	139,343	142,123	12,090	12,096	11,014	10,521	12,066	12,330	---
Butter										
Production (mil. lb.)	1,302.2	1,336.8	1,365.0	118.2	119.8	144.4	138.9	139.1	124.2	115.1
Stocks, beginning (mil. lb.)	256.2	416.1	539.4	678.7	487.6	447.7	495.4	497.0	525.0	560.9
Commercial disappearance (mil. lb.)	915.2	903.5	943.1	65.6	97.2	72.6	75.1	91.9	87.9	---
American cheese										
Production (mil. lb.)	2,894.2	2,768.9	2,936.5	262.0	259.6	247.8	222.9	236.1	254.8	277.7
Stocks, beginning (mil. lb.)	236.2	347.4	318.7	334.7	324.8	346.7	352.1	332.5	326.7	316.2
Commercial disappearance (mil. lb.)	2,784.4	2,756.7	2,900.8	256.2	239.4	240.8	238.8	236.5	268.2	---
Other cheese										
Production (mil. lb.)	3,167.0	3,249.9	3,551.6	290.2	312.0	261.3	266.0	307.9	297.9	290.8
Stocks, beginning (mil. lb.)	93.2	110.6	97.5	115.0	121.9	120.9	129.3	124.4	133.3	133.3
Commercial disappearance (mil. lb.)	3,426.4	3,539.2	3,794.9	311.6	349.8	266.8	284.2	323.7	324.8	---
Nonfat dry milk										
Production (mil. lb.)	879.2	877.5	872.1	89.7	79.2	76.5	83.6	69.1	90.7	103.6
Stocks, beginning (mil. lb.)	49.5	161.9	214.8	138.7	87.6	81.2	72.4	71.5	78.5	87.3
Commercial disappearance (mil. lb.)	697.6	662.7	714.1	62.7	46.2	31.3	34.5	39.3	60.4	---
Frozen dessert										
Production (mil. gal.) 5/	1,174.6	1,203.1	1,196.8	111.9	77.9	73.4	81.7	101.6	105.3	110.5
		Annual		1991			1992			1993
	1990	1991	1992	IV	I	II	III	IV	I	II P
Milk production (mil. lb.)	148,314	148,477	151,747	36,270	37,989	39,077	37,515	37,166	37,764	39,249
Milk per cow (lb.)	14,642	14,860	15,423	3,655	3,852	3,971	3,818	3,782	3,863	4,040
No. of milk cows (1,000)	10,127	9,992	9,839	9,923	9,863	9,841	9,826	9,827	9,775	9,715
Milk-feed price ratio 6/	1.71	1.58	1.69	1.77	1.68	1.65	1.75	1.69	1.60	1.68
Returns over concentrate costs (\$/cwt milk) 6/	10.17	8.95	9.74	10.45	9.60	9.50	10.10	9.75	9.01	9.59

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area. 3/ Includes products exported through the Dairy Export Incentive Program (DEIP). 4/ Milk equivalent, fat basis. 5/ Hard ice cream, ice milk, & hard sherbet. 6/ Based on average milk price after adjustment for price support deductions. 7/ Less than 50,000 pounds. 8/ Estimated. -- = not available.

Information contact: LaVerne T. Williams (202) 219-0770.

Table 15.—Wool

	Annual			1991		1992				1993
	1990	1991	1992	IV	I	II	III	IV	I	
U.S. wool price, (cts./lb.) 1/	256	199	204	182	209	222	210	176	146	
Imported wool price, (cts./lb.) 2/	287	187	210	222	250	233	203	189	171	
U.S. mill consumption, scoured										
Apparel wool (1,000 lb.)	120,622	137,187	139,715	33,916	36,929	36,045	34,462	32,279	35,152	
Carpet wool (1,000 lb.)	12,124	14,352	14,726	3,588	4,580	3,623	3,145	3,378	4,917	

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. -- = not available.

Information contact: John Lawler (202) 219-0840.

Table 16.—Meat Animals

	Annual			1992		1993				
	1990	1991	1992	May	Dec	Jan	Feb	Mar	Apr	May
Cattle on feed (7 States)										
Number on feed (1,000 head) 1/	8,378	8,992	8,397	7,818	8,894	9,073	9,055	8,766	8,711	8,349
Placed on feed (1,000 head)	21,030	19,704	20,498	1,724	1,694	1,621	1,262	1,621	1,316	1,786
Marketings (1,000 head)	19,198	19,066	18,623	1,594	1,414	1,509	1,441	1,565	1,552	1,646
Other disappearance (1,000 head)	1,218	1,233	1,199	122	101	130	110	111	126	136
Beef steer—corn price ratio,										
Omaha 2/	32.8	31.6	33.3	30.6	38.8	39.6	40.0	38.7	37.6	37.5
Hog—corn price ratio, Omaha 2/	23.1	21.1	19.0	18.7	21.2	20.7	22.2	22.1	20.9	21.7
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, Omaha 1,000–1,100 lb.	77.40	73.83	74.65	76.31	76.58	79.15	80.38	82.45	81.47	80.97
Choice steers, Neb. Direct,										
1,100–1,300 lb.	78.56	74.28	75.36	76.18	77.34	79.01	80.34	82.60	82.25	80.39
Boning utility cows, Sioux Falls	53.60	50.31	44.84	45.63	44.71	46.50	47.25	49.50	49.15	49.00
Feeder cattle										
Medium no. 1, Oklahoma City										
600–700 lb.	92.15	92.74	85.57	84.99	86.67	89.92	89.06	90.49	92.82	93.78
Slaughter hogs										
Barrows & gilts, Iowa, S. Minn.	55.32	49.69	43.05	46.41	42.73	42.18	44.81	47.51	46.09	47.69
Feeder pigs										
S. Mo. 40–50 lb. (per head)	51.46	39.84	31.71	32.10	29.78	34.63	48.17	51.38	49.35	43.88
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	55.54	53.21	61.00	68.88	67.25	69.88	73.38	75.50	71.25	62.50
Ewes, Good, San Angelo	35.21	31.98	35.39	31.63	40.75	39.94	43.44	46.80	31.95	36.29
Feeder lambs										
Choice, San Angelo	62.95	53.54	62.09	64.69	71.13	73.63	76.09	84.10	71.45	62.50
Wholesale meat prices, Midwest										
Boxed beef cut-out value	123.21	118.31	116.73	119.18	119.95	122.69	122.13	124.80	126.12	127.19
Canner & cutter cow beef	99.96	99.42	93.85	95.31	95.31	96.58	97.23	96.13	95.55	96.36
Pork loins, 14–18 lb. 3/	117.52	108.39	101.41	108.94	96.22	98.22	100.05	100.61	107.61	111.16
Pork bellies, 12–14 lb.	53.80	47.79	30.39	34.09	28.80	31.97	33.22	41.28	41.19	39.86
Hams, skinned, 17–20 lb.	84.87	75.68	67.42	62.27	72.67	61.98	68.83	73.78	63.81	63.09
All fresh beef retail price 4/	262.48	271.05	266.87	267.08	266.95	270.43	272.48	273.21	275.96	276.90
Commercial slaughter (1,000 head) 5/										
Cattle	33,241	32,690	32,873	2,746	2,703	2,669	2,466	2,775	2,681	2,775
Steers	16,587	16,728	17,135	1,473	1,383	1,334	1,264	1,434	1,409	1,504
Heifers	10,090	9,725	9,236	772	710	753	690	747	721	766
Cows	5,920	5,623	5,846	446	560	533	466	542	499	452
Bulls & stags	644	614	653	55	50	49	46	52	52	53
Calves	1,789	1,436	1,371	106	124	104	99	119	98	85
Sheep & lambs	5,654	5,722	5,493	388	478	393	395	489	482	411
Hogs	85,138	88,169	94,888	7,063	8,360	7,832	7,092	8,146	8,002	7,145
Commercial production (mil. lb.)										
Beef	22,634	22,800	22,968	1,900	1,855	1,823	1,677	1,858	1,782	1,857
Veal	316	296	299	25	26	22	21	26	22	20
Lamb & mutton	358	358	343	25	29	25	25	32	30	27
Pork	15,300	15,948	17,185	1,287	1,524	1,435	1,290	1,481	1,465	1,309

	Annual			1992				1993		
	1990	1991	1992	I	II	III	IV	I	II	III
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	9,943	10,827	10,135	10,135	9,693	8,847	8,920	10,884	10,462	---
Placed on feed (1,000 head)	24,803	23,208	24,246	5,403	5,273	6,107	7,463	5,326	---	---
Marketings (1,000 head)	22,526	22,383	22,061	5,441	5,675	5,766	5,179	5,309	* 5,865	---
Other disappearance (1,000 head)	1,393	1,517	1,436	404	444	268	320	439	---	---
Hogs & pigs (10 States) 6/										
Inventory (1,000 head) 1/	42,200	42,900	45,735	45,735	44,800	47,255	49,175	47,140	46,130	47,700
Breeding (1,000 head) 1/	5,275	5,257	5,610	5,610	5,555	5,845	5,840	5,735	5,730	5,765
Market (1,000 head) 1/	36,925	37,643	40,125	40,125	39,245	41,410	43,335	41,405	40,400	41,935
Farrowings (1,000 head)	8,960	9,516	10,202	2,296	2,663	2,521	2,458	2,315	2,630	* 2,421
Pig crop (1,000 head)	70,589	75,330	82,497	18,532	21,570	20,559	19,829	18,954	21,362	---

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Prior to 1984, 8–14 lb.; 1984 & 1985, 14–17 lb.; beginning 1986, 14–18 lb. 4/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 5/ Classes estimated. 6/ Quarters are Dec. of preceding year–Feb. (I), Mar.–May (II), June–Aug. (III), & Sept.–Nov. (IV). May not add to NASS totals due to rounding. — = not available. * Intentions.

Information contact: Polly Cochran (202) 219-0767.

Crops & Products

Table 17.—Supply & Utilization^{1,2}

	Area				Production	Total supply ^{4/}	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price ^{5/}
	Set aside ^{3/}	Planted	Harvested	Yield								
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
Wheat												
1988/89	22.5	65.5	53.2	34.1	1,812	3,096	150	829	1,415	2,394	702	3.72
1989/90	9.6	76.6	62.2	32.7	2,037	2,762	144	849	1,232	2,225	536	3.72
1990/91	7.5	77.2	69.3	39.5	2,736	3,309	499	875	1,068	2,443	866	2.61
1991/92*	15.9	69.9	57.7	34.3	1,981	2,888	254	883	1,280	2,416	472	3.00
1992/93*	7.3	72.3	62.4	39.4	2,459	3,001	194	923	1,355	2,472	529	3.24
1993/94*	5.0	72.1	64.2	40.5	2,601	3,205	325	939	1,200	2,464	741	2.45-2.85
Rice												
	Mil. acres			Lb./acre				Mil. cwt (rough equiv.)				\$/cwt
1988/89	1.09	2.93	2.90	5,514	159.9	195.1	—	6/ 82.5	85.9	168.4	26.7	6.83
1989/90	1.18	2.73	2.69	5,749	154.5	185.6	—	6/ 82.1	77.2	159.3	26.4	7.35
1990/91	1.02	2.90	2.82	5,529	156.1	187.2	—	6/ 91.7	70.9	162.7	24.6	6.70
1991/92*	0.9	2.88	2.78	5,674	157.5	187.3	—	6/ 93.7	66.4	160.1	27.3	7.58
1992/93*	0.4	3.17	3.13	5,722	179.1	212.4	—	6/ 97.5	79.0	176.5	35.9	5.90-6.00
1993/94*	0.6	3.02	2.97	5,657	168.0	210.4	—	6/ 100.5	80.0	180.5	29.9	4.50-6.00
Corn												
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
1988/89	20.5	67.7	58.3	84.6	4,929	9,191	3,941	1,293	2,026	7,260	1,930	2.54
1989/90	10.8	72.2	64.7	116.3	7,525	9,458	4,389	1,356	2,368	8,113	1,344	2.36
1990/91	10.7	74.2	67.0	118.5	7,934	9,282	4,663	1,373	1,725	7,761	1,521	2.28
1991/92*	7.4	76.0	68.8	108.6	7,475	9,016	4,878	1,454	1,584	7,916	1,100	2.37
1992/93*	5.3	79.3	72.1	131.4	9,479	10,584	5,250	1,510	1,700	8,460	2,124	2.05-2.10
1993/94*	9.0	74.3	66.5	118.0	7,850	9,979	5,300	1,550	1,500	8,350	1,629	2.00-2.40
Sorghum												
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
1988/89	3.9	10.3	9.0	63.8	577	1,239	466	22	311	800	440	2.27
1989/90	3.3	12.6	11.1	55.4	615	1,055	517	15	303	835	220	2.10
1990/91	3.3	10.5	9.1	63.1	573	793	410	9	232	651	143	2.12
1991/92*	2.5	11.1	9.9	59.3	585	727	374	9	292	674	53	2.25
1992/93*	2.0	13.3	12.2	72.8	884	937	475	8	275	758	180	1.85-1.90
1993/94*	2.0	11.0	10.1	66.0	665	845	425	8	275	708	137	1.85-2.25
Barley												
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
1988/89	2.8	9.8	7.6	38.0	290	622	171	175	79	425	196	2.80
1989/90	2.3	9.1	8.3	48.6	404	614	193	175	84	453	161	2.42
1990/91	2.9	8.2	7.5	56.1	422	596	205	176	81	461	135	2.14
1991/92*	2.2	8.9	8.4	55.2	464	624	230	171	94	496	129	2.10
1992/93*	2.3	7.8	7.3	62.4	456	596	199	165	80	444	152	2.04
1993/94*	2.2	7.9	7.5	61.3	462	634	215	165	80	460	174	1.90-2.30
Oats												
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
1988/89	0.3	13.9	5.5	39.3	218	392	194	100	1	294	98	2.61
1989/90	0.4	12.1	6.9	54.3	374	538	266	115	1	381	157	1.49
1990/91	0.2	10.4	5.9	60.1	358	578	286	120	1	407	171	1.14
1991/92*	0.6	8.7	4.8	50.7	243	489	235	125	2	362	128	1.20
1992/93*	0.7	8.0	4.5	65.6	295	474	230	125	6	361	113	1.32
1993/94*	0.8	8.1	4.2	63.3	263	441	210	125	5	340	101	1.20-1.60
Soybeans												
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
1988/89	0	58.8	57.4	27.0	1,549	1,855	7/ 88	1,058	527	1,673	182	7.42
1989/90	0	60.8	59.5	32.3	1,924	2,109	7/ 101	1,146	623	1,870	239	5.69
1990/91	0	57.8	56.5	34.1	1,926	2,168	7/ 95	1,187	557	1,839	329	5.74
1991/92*	0	59.2	58.0	34.2	1,987	2,319	7/ 103	1,254	684	2,041	278	5.58
1992/93*	0	59.3	58.4	37.6	2,197	2,477	7/ 112	1,280	775	2,187	290	5.50
1993/94*	0	59.5	58.0	34.1	1,975	2,270	7/ 100	1,265	680	2,045	225	5.75-7.00
Soybean oil												
								Mil. lbs.				¢/Cts./lb.
1988/89	—	—	—	—	11,737	13,967	—	10,591	1,661	12,252	1,715	21.10
1989/90	—	—	—	—	13,004	14,741	—	12,083	1,353	13,436	1,305	22.30
1990/91	—	—	—	—	13,408	14,730	—	12,164	780	12,944	1,786	21.00
1991/92*	—	—	—	—	14,345	16,132	—	12,245	1,648	13,893	2,239	19.10
1992/93*	—	—	—	—	13,794	16,035	—	12,700	1,550	14,250	1,785	21.25
1993/94*	—	—	—	—	14,400	16,190	—	12,900	1,500	14,400	1,790	21.5-25.0
Soybean meal												
								1,000 tons				¢/ \$/ton
1988/89	—	—	—	—	24,943	25,100	—	19,657	5,270	24,927	173	252.4
1989/90	—	—	—	—	27,719	27,900	—	22,263	5,319	27,582	318	186.5
1990/91	—	—	—	—	26,325	28,688	—	22,934	5,469	28,403	285	181.4
1991/92*	—	—	—	—	29,831	30,183	—	23,008	6,945	29,953	230	189.2
1992/93*	—	—	—	—	30,335	30,675	—	23,850	6,550	30,400	275	192.5
1993/94*	—	—	—	—	30,100	30,475	—	24,200	6,000	30,200	275	185-215

See footnotes at end of table.

Table 17.—Supply & Utilization, continued

	Area		Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending Stocks	Farm price 5/
	Set Aside 3/	Planted										
	Mil. acres		Lb./acre				Mil. bales				Cts./lb.	
Cotton 10/												
1988/89	2.2	12.5	11.9	619	15.4	21.2	---	7.8	6.1	13.9	7.1	56.60
1989/90	3.5	10.6	9.5	614	12.2	19.3	---	8.8	7.7	16.5	3.0	66.20
1990/91	2.0	12.3	11.7	634	15.5	18.5	---	8.7	7.8	16.5	2.3	67.10
1991/92*	1.2	14.1	13.0	652	17.6	20.0	---	9.6	6.7	16.3	3.7	58.10
1992/93*	1.7	13.2	11.1	699	16.2	19.9	---	9.9	5.3	15.2	4.6 11/	54.60
1993/94*	1.3	13.7	12.6	680	17.8	22.4	---	10.3	6.3	16.6	5.8 12/	

* July 12, 1993 Supply & Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats, August 1 for cotton & rice, September 1 for soybeans, corn, & sorghum, October 1 for soybean meal & soybean oil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2204.622 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, & 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 & 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 & Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Simple average of crude soybean oil, Decatur. 9/ Simple average of 48 percent, Decatur. 10/ Upland & extra long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. 11/ Weighted average for August 1-April 1; not a projection for the marketing year. 12/ USDA is prohibited from publishing cotton price projections. --- = not available or not applicable. Note: Set-aside data for 1993 are from June 15 sign-up report.

Information contact: Commodity Economics Division, Crops Branch (202) 219-0840.

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

	Marketing year 1/				1992 May	1993				
	1988/89	1989/90	1990/91	1991/92		Jan	Feb	Mar	Apr	May
Wheat, No. 1 HRW, Kansas City (\$/bu.) 2/	4.17	4.22	2.94	3.77	3.90	3.97	3.75	3.74	3.59	3.51
Wheat, DNS, Minneapolis (\$/bu.) 3/	4.36	4.16	3.06	3.82	4.44	4.05	3.87	3.87	3.80	3.71
Rice, S.W. La. (\$/cwt) 4/	14.85	15.55	15.25	16.48	15.70	13.40	13.00	12.60	12.15	11.90
Corn, no. 2 yellow, 30 day, Chicago (\$/bu.)	2.68	2.54	2.41	2.52	2.60	2.18	2.14	2.23	2.32	2.29
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	4.17	4.21	4.08	4.36	4.54	3.70	3.66	3.70	3.72	3.82
Barley, feed, Duluth (\$/bu.) 5/	2.32	2.20	2.13	2.17	2.38	2.06	2.08	2.12	2.12	2.05
Barley, malting, Minneapolis (\$/bu.)	4.11	3.28	2.42	2.38	NQ	2.36	2.32	2.33	2.34	2.34
U.S. price, SLM, 1-1/16 in. (cts./lb.) 6/	57.7	69.8	74.8	56.7	55.5	53.7	55.4	56.5	56.2	56.4
Northern Europe prices index (cts./lb.) 7/	66.4	82.3	82.9	62.9	61.0	57.4	60.8	61.4	60.9	60.0
U.S. M 1-3/32 in. (cts./lb.) 8/	69.2	83.6	88.2	66.3	63.6	63.4	66.1	66.6	66.3	65.1
Soybeans, no. 1 yellow, 30 day, Chicago (\$/bu.)	7.41	5.86	5.76	5.75	5.96	5.73	5.56	5.59	5.88	5.99
Soybean oil, crude, Decatur (cts./lb.)	21.10	22.30	21.00	19.10	21.15	21.23	20.72	21.00	21.24	20.15
Soybean meal, 48% protein, Decatur (\$/ton) 9/	252.40	186.50	181.40	189.20	193.25	188.75	179.90	183.60	187.40	187.40

1/ Beginning June 1 for wheat & barley; Aug. 1 for rice & cotton; Sept. 1 for corn, sorghum & soybeans; Oct. 1 for soybean meal & oil. 2/ Ordinary protein. 3/ 14% protein. 4/ Long grain, milled basis. 5/ Beginning Mar. 1987 reporting point changed from Minneapolis to Duluth. 6/ Average spot market. 7/ Liverpool Cotlook "A" Index; average of five lowest prices of 13 selected growths. 8/ Memphis territory growths. 9/ Note change to 48% protein. NQ = no quotation.

Information contacts: Wheat, rice, & feed grains, Joy Harwood (202) 219-0840; Cotton, Les Meyer (202) 219-0840; Soybeans, Brenda Toland, (202) 219-0840.

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

	Target price	Basic loan rate	Findley or announced loan rate 1/	Payment rates			Effective base acres 2/	Program 3/	Partici- pation rate 4/
				Paid land diversion					
				Total deficiency	Mandatory	Optional			
				\$/bu.			Mil. acres	Percent of base	Percent of base
Wheat									
1987/88	4.38	2.85	2.28	1.81	---	---	87.6	27.5/0/0	88
1988/89	4.23	2.76	2.21	0.69	---	---	84.8	27.5/0/0	86
1989/90	4.10	2.58	2.06	0.32	---	---	82.3	10/0/0	78
1990/91 5/	4.00	2.44	1.95	1.28	---	---	80.5	6/ 5/0/0	83
1991/92	4.00	2.52	2.04	*1.35	---	---	79.2	15/0/0	85
1992/93	4.00	2.58	2.21	**0.81	---	---	78.9	5/0/0	83
1993/94	4.00	2.86	2.45	***1.05	---	---	78.5	0/0/0	87
1994/95	---	---	---	---	---	---	---	0/0/0	---
Rice									
				\$/cwt					
1987/88	11.66	6.84	7/ 6.15	4.82	---	---	4.2	35/0/0	96
1988/89	11.15	6.63	7/ 6.50	4.31	---	---	4.2	25/0/0	94
1989/90	10.80	6.50	7/ 6.00	3.56	---	---	4.2	25/0/0	94
1990/91 5/	10.71	6.50	7/ 5.40	4.16	---	---	4.2	20/0/0	95
1991/92	10.71	6.50	7/ 5.85	3.07	---	---	4.2	5/0/0	95
1992/93	10.71	6.50	---	**4.21	---	---	4.1	0/0/0	96
1993/94	10.71	6.50	---	***4.21	---	---	4.1	5/0/0	96
Corn									
				\$/bu.					
1987/88	3.03	2.28	1.82	1.09	---	2.00	81.5	20/0/15	90
1988/89	2.93	2.21	1.77	0.36	---	1.75	82.9	20/0/10	87
1989/90	2.84	2.06	1.65	0.58	---	---	82.7	10/0/0	79
1990/91 5/	2.75	1.96	1.57	0.51	---	---	82.6	10/0/0	78
1991/92	2.75	1.89	1.62	0.41	---	---	82.7	7.5/0/0	77
1992/93	2.75	2.01	1.72	**0.73	---	---	82.1	5/0/0	76
1993/94	2.75	1.99	1.72	***0.72	---	---	81.9	10/0/0	81
Sorghum									
				\$/bu.					
1987/88	2.88	2.17	1.74	1.14	---	1.90	17.4	8/ 20/0/15	84
1988/89	2.78	2.10	1.68	0.48	---	1.65	16.8	20/0/10	82
1989/90	2.70	1.96	1.57	0.66	---	---	16.2	10/0/0	71
1990/91 5/	2.61	1.86	1.49	0.56	---	---	15.4	10/0/0	70
1991/92	2.61	1.80	1.54	0.37	---	---	13.5	7.5/0/0	77
1992/93	2.61	1.91	1.63	**0.70	---	---	13.6	5/0/0	79
1993/94	2.61	1.89	1.63	***0.70	---	---	13.5	5/0/0	81
Barley									
				\$/bu.					
1987/88	2.60	1.86	1.49	0.79	---	1.60	12.5	8/ 20/0/15	85
1988/89	2.51	1.80	1.44	0.00	---	1.40	12.5	20/0/10	79
1989/90	2.44	1.68	1.34	0.00	---	---	12.3	10/0/0	67
1990/91 5/	2.36	1.60	1.28	0.20	---	---	11.9	10/0/0	68
1991/92	2.36	1.54	1.32	0.62	---	---	11.5	7.5/0/0	76
1992/93	2.36	1.64	1.40	**0.56	---	---	11.1	5/0/0	75
1993/94	2.36	1.62	1.40	***0.52	---	---	10.8	0/0/0	82
Oats									
				\$/bu.					
1987/88	1.60	1.17	0.94	0.20	---	0.80	8.4	8/ 20/0/15	45
1988/89	1.55	1.14	0.91	0.00	---	---	7.9	5/0/0	30
1989/90	1.50	1.06	0.85	0.00	---	---	7.6	5/0/0	18
1990/91 5/	1.45	1.01	0.81	0.32	---	---	7.5	5/0/0	09
1991/92	1.45	0.97	0.83	0.35	---	---	7.3	0/0/0	38
1992/93	1.45	1.03	0.88	**0.17	---	---	7.2	0/0/0	40
1993/94	1.45	1.02	0.88	***0.15	---	---	7.1	0/0/0	46
Soybeans 9/									
				\$/bu.					
1987/88	---	---	4.77	---	---	---	---	---	---
1988/89	---	---	4.77	---	---	---	---	---	---
1989/90	---	---	4.53	---	---	---	---	10/ 10/25	---
1990/91 5/	---	---	4.50	---	---	---	---	10/ 0/25	---
1991/92	---	---	5.02	---	---	---	---	10/ 0/25	---
1992/93	---	---	5.02	---	---	---	---	10/ 0/25	---
1993/94	---	---	5.02	---	---	---	---	10/ 0/25	---
Upland cotton									
				Cts./lb.					
1987/88	79.4	52.25	11/ 52.25	17.3	---	---	14.5	25/0/0	93
1988/89	75.9	51.80	11/ 51.80	19.4	---	---	14.5	12.5/0/0	89
1989/90	73.4	50.00	11/ 50.00	13.1	---	---	14.6	25/0/0	89
1990/91 5/	72.9	50.27	11/ 50.27	7.3	---	---	14.4	12.5/0/0	86
1991/92 12/	72.9	50.77	11/ 47.23	10.1	---	---	14.6	5/0/0	84
1992/93	72.9	52.35	11/ ---	**20.3	---	---	14.9	10/0/0	89
1993/94	72.9	52.35	11/ ---	***20.55	---	---	15.1	7.5/0/0	90

1/ There are no Findley loan rates for rice or cotton. See footnotes 7/ & 11/. 2/ National effective crop acreage base as determined by ASCS. 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 acres enrolled in acreage reduction programs. 5/ Payments & loans were reduced by 1.4 percent in 1990/91 due to Gramm-Rudman-Hollings. Budget Reconciliation Act reductions to deficiency payments rates were also in effect in that year. Data do not include these reductions. 6/ Under 1990 modified contracts, participating producers plant up to 105 percent of their wheat base acres. For every acre planted above 95 percent of base, the acreage used to compute deficiency payments was cut by 1 acre. 7/ 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). However, loans cannot be repaid at less than a specified fraction of the loan rate. Data refer to market-year average loan repayment rates. 8/ The sorghum, oats, & barley programs are the same as for corn except as indicated. 9/ There are no target prices, base acres, acreage reduction programs, or deficiency payment rates for soybeans. 10/ Nominal percentage of program crop base acres permitted to shift into soybeans without loss of base. 11/ A marketing loan has been in effect for cotton since 1986/87. In 1987/88 & 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. 12/ A marketing certificate program was implemented on Aug. 1, 1991. --- = not available.

* For wheat, the 1991/92 rate is the total deficiency payment rate for the "regular" program. For the winter wheat option, the rate is \$1.25.
 ** For wheat, corn, sorghum, barley, and oats, regular deficiency payment rate based on the 5-month price. For rice and upland cotton, total deficiency payment rate.
 *** Estimated total deficiency payment rate. Minimum guaranteed payment rate for 0/92 (wheat & feed grains) & 50/92 (rice and upland cotton) programs. Sign-up for 1993 programs was March 1-April 30, 1993.

Note: 1993 effective base acres and participation rates are from June 15 signup report.
 Information contact: Joy Harwood (202) 219-0840.

Table 20.—Fruit

	1984	1985	1986	1987	1988	1989	1990	1991	1992 P
Citrus 1/ Production (1,000 ton)	10,832	10,525	11,058	11,993	12,761	13,186	10,860	11,285	12,449
Per capita consumpt. (lbs.) 2/	22.5	21.5	24.2	23.9	25.4	23.5	21.4	19.1	24.3
Noncitrus 3/ Production (1,000 tons)	14,301	14,191	13,874	16,011	15,893	16,365	15,657	15,750	17,142
Per capita consumpt. (lbs.) 2/	66.2	65.1	68.7	73.4	71.7	73.0	70.8	70.8	74.4
	1992				1993				
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
F.o.b. shipping point prices									
Apples (\$/carton) 4/	16.73	15.38	14.46	13.60	14.50	12.33	10.66	11.33	11.50
Pears (\$/box) 5/	—	13.05	13.54	13.86	16.00	16.00	16.00	16.08	16.28
Grower prices									
Oranges (\$/box) 6/	1.37	1.79	3.80	2.90	2.66	2.39	2.11	3.23	3.65
Grapefruit (\$/box) 6/	3.73	7.09	4.11	4.66	3.00	2.42	1.48	2.13	1.62
Stocks, ending									
Fresh apples (mil. lbs.)	3,479.5	5,580.0	4,988.3	4,077.3	3,433.1	2,769.3	2,011.1	1,341.5	895.1
Fresh pears (mil. lbs.)	523.1	380.4	276.7	223.4	174.2	128.1	81.7	50.8	23.3
Frozen fruits (mil. lbs.)	935.3	1,073.5	1,008.2	888.4	823.3	842.1	744.8	690.3	663.2
Frozen orange juice (mil. lbs.)	742.0	666.2	638.0	892.9	1,135.9	1,289.4	1,283.7	1,440.9	1,492.3

1/ 1992 indicated 1991/92 season. 2/ Fresh per capita consumption. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton tray pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns. P = preliminary. — = not available.

Information contact: Wynne Napper (202) 219-0884.

Table 21.—Vegetables

	Calendar year									
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 P
Production										
Total vegetables (1,000 cwt)	403,509	456,334	453,030	448,629	478,381	468,779	542,437	561,704	564,582	534,951
Fresh (1,000 cwt) 1/ 3/	185,782	201,817	203,549	203,165	220,539	228,397	239,281	239,104	229,506	236,140
Processed (tons) 2/ 3/	10,886,350	12,725,880	12,474,040	12,273,200	12,892,100	12,019,110	15,157,790	16,130,020	16,753,820	14,940,550
Mushrooms (1,000 lbs.) 4/	561,531	595,681	587,956	614,393	631,819	667,759	714,992	749,151	738,832	—
Potatoes (1,000 cwt)	333,726	362,039	406,609	361,743	389,320	356,438	370,444	402,110	417,622	411,636
Sweet potatoes (1,000 cwt)	12,083	12,902	14,573	12,368	11,611	10,945	11,358	12,594	11,203	11,760
Dry edible beans (1,000 cwt)	15,520	21,070	22,298	22,960	26,031	19,253	23,729	32,379	33,765	22,047
	1992					1993				
	Feb	Mar	Apr	May	Jun	July	Feb	Mar	Apr	May
Shipments (1,000 cwt)										
Fresh	17,429	17,527	26,955	28,050	29,056	22,410	18,977	24,099	18,956	25,574
Iceberg lettuce	4,223	4,344	5,194	5,274	4,811	4,850	4,172	5,054	3,570	5,031
Tomatoes, all	2,343	2,463	3,281	3,554	3,499	2,957	3,109	3,885	2,865	2,540
Dry-bulb onions	2,673	2,591	3,406	2,752	2,786	2,648	2,747	3,390	2,448	2,989
Other 5/	8,190	8,129	15,074	16,470	17,960	11,955	8,949	11,770	10,073	15,014
Potatoes, all	13,607	16,653	21,011	17,628	12,885	9,651	11,180	18,545	18,489	17,946
Sweet potatoes	288	277	397	212	190	154	270	468	334	216

1/ Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & cauliflower. 3/ Asparagus & cucumber estimates were not available for 1982 & 1983. 4/ Fresh & processing agaricus mushrooms only. Excludes specialty varieties. Crop year July 1 - June 30. 5/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, bell peppers, squash, cantaloupes, honeydews, & watermelons. p = preliminary.

Information contacts: Gary Lucier or John Love (202) 219-0884.

Table 22.—Other Commodities

	Annual					1992					1993
	1988	1989	1990	1991	1992	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	
Sugar											
Production 1/	7,087	6,841	6,334	7,133	7,501	2,136	716	722	3,929	2,351	
Deliveries 1/	8,188	8,340	8,661	8,704	8,920	2,007	2,208	2,409	2,312	2,064	
Stocks, ending 1/	3,132	2,947	2,729	3,039	3,220	3,624	2,757	1,451	3,225	3,904	
Coffee											
Composite green price N.Y. (cts./lb.)	119.59	95.17	76.93	70.09	55.30	59.19	51.72	48.36	61.94	60.48	
Imports, green bean equiv. (mil. lbs.) 2/	2,072	2,685	2,715	2,553	2,989	840	720	704	705	757	
	Annual					1992					1993
	1990	1991	1992	Feb	Sept	Oct	Nov	Dec	Jan	Feb	
Tobacco											
Prices at auctions 3/											
Flue-cured (\$/lb.)	167.3	172.3	—	—	182.5	182.0	172.7	—	—	—	
Burley (\$/lb.)	175.3	178.8	—	160.0	—	—	182.7	182.5	180.0	178.0	
Domestic consumption 4/											
Cigarettes (bil.)	523.1	516.3	509.5	38.6	43.0	44.7	44.2	38.4	31.9	39.2	
Large cigars (mil.)	2,343.5	2,231.9	2,217.1	155.7	194.3	177.9	189.6	171.7	125.1	141.1	

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July-June for flue-cured. Oct-Sept. for burley. 4/ Taxable removals. — = not available.

Information contacts: Sugar, Peter Buzzanell (202) 219-0886, Coffee, Fred Gray (202) 219-0888, Tobacco, Verner Grise (202) 219-0890.

World Agriculture

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

	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92 P	1992/93 F
	Million units						
Wheat							
Area (hectares)	228.0	219.7	217.4	225.8	231.4	222.2	222.5
Production (metric tons)	524.1	496.0	495.0	533.0	587.8	542.2	558.4
Exports (metric tons) 1/	90.7	112.1	102.9	102.0	101.9	109.4	108.0
Consumption (metric tons) 2/	515.6	525.0	525.3	531.9	564.5	559.8	553.1
Ending stocks (metric tons) 3/	178.0	148.9	118.7	119.8	143.1	125.5	130.8
Coarse grains							
Area (hectares)	335.3	323.0	323.1	320.8	313.6	317.6	316.3
Production (metric tons)	822.1	783.6	720.8	790.3	820.1	800.8	853.2
Exports (metric tons) 1/	82.9	88.3	95.2	103.8	88.1	94.0	91.7
Consumption (metric tons) 2/	796.2	806.6	784.8	813.4	807.5	807.5	828.5
Ending stocks (metric tons) 3/	235.2	215.0	151.0	128.0	140.6	133.9	158.6
Rice, milled							
Area (hectares)	145.1	141.7	145.4	146.8	147.1	145.5	144.9
Production (metric tons)	316.7	314.5	330.0	342.6	350.7	348.2	350.4
Exports (metric tons) 4/	13.4	11.8	14.6	12.4	12.8	14.9	14.3
Consumption (metric tons) 2/	320.8	319.9	327.7	335.9	345.7	352.8	352.9
Ending stocks (metric tons) 3/	50.9	45.5	47.8	54.5	59.5	54.9	52.4
Total grains							
Area (hectares)	708.4	684.4	685.9	693.4	692.1	685.3	683.7
Production (metric tons)	1,662.9	1,594.1	1,545.8	1,665.9	1,758.6	1,691.2	1,762.0
Exports (metric tons) 1/	187.0	212.2	212.7	218.2	202.8	218.3	214.0
Consumption (metric tons) 2/	1,632.6	1,651.5	1,637.8	1,681.2	1,717.7	1,720.1	1,734.5
Ending stocks (metric tons) 3/	464.1	409.4	317.5	302.3	343.2	314.3	341.8
Oilseeds							
Crush (metric tons)	161.8	168.4	164.5	172.0	177.4	185.3	184.9
Production (metric tons)	194.9	210.5	201.6	212.5	215.9	223.7	227.3
Exports (metric tons)	37.7	39.5	31.5	35.5	33.0	37.0	38.8
Ending stocks (metric tons)	23.3	24.0	22.1	23.3	22.8	21.4	22.1
Meals							
Production (metric tons)	110.7	115.4	111.1	117.1	119.8	124.9	125.1
Exports (metric tons)	36.7	35.8	37.4	39.9	40.7	43.1	42.4
Oils							
Production (metric tons)	50.4	53.3	53.3	57.1	58.3	60.7	60.8
Exports (metric tons)	16.9	17.5	18.1	20.4	20.6	21.1	20.5
Cotton							
Area (hectares)	29.2	30.8	33.7	31.5	33.1	34.7	32.7
Production (bales)	70.6	81.1	84.4	79.9	87.0	96.0	82.5
Exports (bales)	33.4	29.9	33.1	31.3	29.8	28.4	25.4
Consumption (bales)	82.8	84.1	85.3	86.7	85.5	84.6	85.5
Ending stocks (bales)	35.7	32.8	31.9	26.3	28.6	40.7	37.8
	1987	1988	1989	1990	1991	1992	1993 F
Red meat							
Production (metric tons)	112.9	116.6	118.1	120.3	121.3	121.3	123.1
Consumption (metric tons)	111.0	114.6	116.7	118.1	119.3	119.8	121.4
Exports (metric tons) 1/	6.7	7.4	7.6	7.6	8.0	7.8	8.1
Poultry 5/							
Production (metric tons)	31.3	32.7	34.0	35.8	37.8	39.2	41.0
Consumption (metric tons)	30.8	32.0	33.2	34.9	37.1	38.8	40.6
Exports (metric tons) 1/	1.5	1.8	1.8	2.1	2.1	2.4	2.5
Dairy							
Milk production (metric tons)	425.7	428.9	434.7	442.0	429.4	415.0	407.9

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1987 data correspond with 1986/87, etc. 5/ Poultry excludes the Peoples Republic of China before 1986. P = preliminary. F = forecast.

Information contacts: Crops, Carol Whitton (202) 219-0824; red meat & poultry, Linda Bailey (202) 219-1285; dairy, Sara Short (202) 219-0770.

U.S. Agricultural Trade

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

	Annual			1992		1993				
	1990	1991	1992	May	Dec	Jan	Feb	Mar	Apr	May
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	3.72	3.52	4.13	4.09	4.03	4.25	4.06	4.05	3.87	3.70
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.79	2.75	2.66	2.80	2.42	2.43	2.42	4.49	2.57	2.51
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.65	2.69	2.63	2.75	2.45	2.44	2.42	2.46	2.44	2.42
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	6.24	6.05	6.01	6.26	5.96	6.08	6.03	6.09	6.18	6.26
Soybean oil, Decatur (cts./lb.)	22.75	20.14	19.16	20.06	20.58	21.20	20.61	21.01	21.29	21.26
Soybean meal, Decatur (\$/ton)	169.37	172.90	177.79	183.40	188.30	188.18	179.87	183.37	187.42	193.74
Cotton, 7-market avg. spot (cts./lb.)	71.25	69.69	53.90	55.45	51.85	53.72	55.38	56.45	56.16	56.36
Tobacco, avg. price at auction (cts./lb.)	170.57	179.23	172.74	162.04	182.51	179.98	186.53	186.53	157.44	157.44
Rice, f.o.b. mill, Houston (\$/cwt)	15.52	16.46	16.80	17.25	15.63	15.25	15.00	15.00	15.00	14.18
Inedible tallow, Chicago (cts./lb.)	13.54	13.26	14.37	13.75	16.00	15.09	14.69	15.24	15.94	15.00
Import commodities										
Coffee, N.Y. spot (\$/lb.)	0.81	0.71	0.50	0.47	0.66	0.58	0.54	0.56	0.51	0.53
Rubber, N.Y. spot (cts./lb.)	46.28	45.73	46.25	46.41	48.03	48.03	48.30	46.41	44.17	43.78
Cocoa beans, N.Y. (\$/lb.)	0.55	0.52	0.47	0.42	0.44	0.45	0.42	0.41	0.43	0.42

Information contact: Mary Teymourian (202) 219-0824.

Table 25.—Indexes of Real Trade-Weighted Dollar Exchange Rates ^{1/}

	1992						1993				
	July	Aug	Sept	Oct	Nov	Dec P	Jan P	Feb P	Mar P	Apr P	May P
	1985 = 100										
Total U.S. trade ^{2/}	59.9	59.0	59.5	61.9	65.6	65.8	67.3	68.4	68.3	66.1	66.9
Agricultural trade											
U.S. markets	74.7	74.2	74.2	75.2	77.6	77.3	78.2	78.4	78.3	77.0	77.3
U.S. competitors	75.6	75.1	77.2	75.7	77.7	77.4	78.3	78.6	79.1	78.4	78.9
Wheat											
U.S. markets	94.8	94.2	94.1	94.1	96.5	95.9	97.3	98.1	99.8	98.8	99.7
U.S. competitors	69.4	69.3	74.4	71.2	73.3	73.3	74.1	73.7	73.0	72.6	72.9
Soybeans											
U.S. markets	61.4	60.7	60.4	61.9	64.6	64.2	65.6	65.9	65.5	63.9	64.3
U.S. competitors	54.9	54.2	53.6	53.3	53.6	53.0	53.3	53.7	53.9	53.8	54.0
Corn											
U.S. markets	67.2	67.1	66.4	67.3	69.2	68.9	69.6	69.3	68.6	67.1	67.1
U.S. competitors	56.5	55.7	55.5	55.9	57.5	57.2	57.5	57.7	57.6	56.3	56.4
Cotton											
U.S. markets	71.3	71.2	70.7	71.6	73.3	73.4	74.1	74.1	73.6	72.4	72.6
U.S. competitors	109.8	109.3	112.1	109.7	110.7	108.4	110.5	110.2	110.4	110.0	110.3

^{1/} Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used. ^{2/} Federal Reserve Board Index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets. P = preliminary.

Information contact: Tim Baxter (202) 219-0718.

Table 26.—Trade Balance

	Fiscal year ^{1/}								Apr
	1986	1987	1988	1989	1990	1991	1992	1993 F	1993
	\$ million								
Exports									
Agricultural	26,312	27,876	35,316	39,590	40,220	37,609	42,417	42,500	3,631
Nonagricultural	179,291	202,911	258,656	301,269	326,059	356,682	377,278	—	33,616
Total ^{2/}	205,603	230,787	293,972	340,859	366,279	394,291	419,695	—	37,247
Imports									
Agricultural	20,884	20,650	21,014	21,476	22,560	22,588	24,323	25,000	2,131
Nonagricultural	342,846	367,374	409,138	441,075	458,101	463,720	487,554	—	45,355
Total ^{3/}	363,730	388,024	430,152	462,551	480,661	486,308	511,877	—	47,486
Trade balance									
Agricultural	5,428	7,226	14,302	18,114	17,660	15,021	18,094	17,500	1,500
Nonagricultural	-163,555	-164,463	-150,482	-139,806	-132,042	-107,038	-110,276	—	-11,739
Total	-158,127	-157,237	-136,180	-121,692	-114,382	-92,017	-92,182	—	-10,239

^{1/} Fiscal years begin October 1 & end September 30. Fiscal year 1992 began Oct. 1, 1991 & ended Sept. 30, 1992. ^{2/} Domestic exports including Department of Defense shipments (F.A.S. value). ^{3/} Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

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

	Fiscal year*			Apr	Fiscal year*			Apr
	1991	1992	1993 F	1993	1991	1992	1993 F	1993
	1,000 units				\$ million			
EXPORTS								
Animals, live (no.) 1/	1,235	1,477	—	76	546	567	—	22
Meats & preps., excl. poultry (mt)	936	1,108	2/ 900	89	2,773	3,236	—	268
Dairy products (mt) 1/	44	172	—	19	293	638	900	62
Poultry meats (mt)	628	795	900	75	737	915	—	75
Fats, oils, & greases (mt)	1,169	1,392	1,500	124	419	498	—	47
Hides & skins incl. furskins	—	—	—	—	1,451	1,337	—	108
Cattle hides, whole (no.) 1/	21,548	20,822	—	1,660	1,191	1,107	—	8
Mink pelts (no.) 1/	3,941	3,160	—	386	74	52	—	5
Grains & feeds (mt)	94,583	100,744	—	9,964	12,175	13,858	3/ 14,200	1,351
Wheat (mt)	26,792	34,287	35,500	3,452	2,867	4,318	4/ 4,800	469
Wheat flour (mt)	987	816	1,000	148	191	165	—	30
Rice (mt)	2,395	2,279	2,400	247	747	757	700	69
Feed grains, incl. products (mt)	52,353	50,646	53,300	4,989	5,790	5,793	5,300	528
Feeds & fodders (mt)	10,943	11,267	5/ 12,300	1,016	1,882	2,019	—	183
Other grain products (mt)	1,113	1,449	—	111	697	807	—	71
Fruits, nuts, & preps. (mt)	2,849	3,505	—	292	3,038	3,514	3,600	251
Fruit juices incl.								
froz. (1,000 hectoliters) 1/	6,311	7,767	—	772	338	427	—	39
Vegetables & preps. (mt)	2,590	2,704	—	236	2,597	2,790	—	302
Tobacco, unmanufactured (mt)	239	246	—	22	1,533	1,568	1,600	139
Cotton, excl. linters (mt)	1,565	1,494	1,300	117	2,605	2,183	1,700	156
Seeds (mt)	514	701	—	52	617	659	700	57
Sugar, cane or beet (mt)	589	492	—	23	219	154	—	7
Oilseeds & products (mt)	22,295	28,642	—	1,994	5,643	7,156	7,500	494
Oilseeds (mt)	15,615	19,970	—	1,364	3,807	4,743	—	331
Soybeans (mt)	15,139	19,247	20,300	1,326	3,465	4,311	4,500	302
Protein meal (mt)	5,628	7,022	—	519	1,113	1,431	—	98
Vegetable oils (mt)	1,051	1,650	—	111	723	982	—	66
Essential oils (mt)	13	13	—	1	183	184	—	14
Other	499	490	—	8	2,441	2,733	—	238
Total	128,513	142,498	150,000	13,016	37,609	42,417	42,500	3,631
IMPORTS								
Animals, live (no.) 1/	3,168	2,830	—	355	1,131	1,275	1,600	148
Meats & preps., excl. poultry (mt)	1,191	1,134	—	89	3,016	2,684	—	214
Beef & veal (mt)	811	813	780	59	2,025	1,933	1,900	145
Pork (mt)	322	263	230	24	865	625	700	57
Dairy products (mt) 1/	231	232	—	18	767	816	900	65
Poultry & products 1/	—	—	—	—	119	132	—	11
Fats, oils, & greases (mt)	33	46	—	5	19	26	—	3
Hides & skins, incl. furskins 1/	—	—	—	—	153	185	—	17
Wool, unmanufactured (mt)	50	54	—	6	175	167	—	20
Grains & feeds (mt)	4,189	5,446	4,900	431	1,282	1,548	1,600	136
Fruits, nuts, & preps., excl. juices (mt)	5,650	5,883	5,900	581	2,741	2,919	—	274
Bananas & plantains (mt)	3,399	3,626	3,800	279	993	1,083	1,100	85
Fruit juices (1,000 hectoliters) 1/	27,948	26,049	24,000	1,892	737	871	—	46
Vegetables & preps. (mt)	2,416	2,171	—	298	2,183	2,125	2,400	239
Tobacco, unmanufactured (mt)	215	364	370	38	698	1,299	1,100	113
Cotton, unmanufactured (mt)	18	11	—	1	16	10	—	1
Seeds (mt)	169	174	200	44	173	214	200	29
Nursery stock & cut flowers 1/	—	—	—	—	538	578	—	61
Sugar, cane or beet (mt)	1,785	1,623	—	176	717	633	—	64
Oilseeds & products (mt)	2,077	2,330	—	198	959	1,124	1,200	95
Oilseeds (mt)	445	429	—	31	151	135	—	12
Protein meal (mt)	412	629	—	51	57	84	—	7
Vegetable oils (mt)	1,220	1,273	—	117	750	904	—	76
Beverages excl. fruit juices (1,000 hectoliters) 1/	12,987	13,739	—	1,107	1,858	2,044	—	165
Coffee, tea, cocoa, spices	2,045	2,391	2,210	176	3,294	3,415	—	231
Coffee, incl. products (mt)	1,116	1,330	1,200	91	1,831	1,798	1,600	115
Cocoa beans & products (mt)	700	773	740	56	1,019	1,122	1,000	73
Rubber & allied gums (mt)	792	920	1,000	87	664	756	900	77
Other	—	—	—	—	1,348	1,503	—	122
Total	—	—	—	—	22,588	24,323	25,000	2,131

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1992 began Oct. 1, 1991 & ended Sept. 30, 1992. 1/ Not included in total volume and also other dairy products for 1991 & 1992. 2/ Forecasts for footnoted items 2/-6/ are based on slightly different groups of commodities. Fiscal 1991 exports of categories used in the 1991 forecasts were 2/ 676,000 m. tons. 3/ 16,014 million. 4/ 4,426 million i.e. includes flour. 5/ 11,065 million m. tons. 6/ Less than \$500. F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

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

Region & country	Fiscal year*			Apr	Change from year* earlier			Apr
	1991	1992	1993 F	1993	1991	1992	1993 F	1993
	\$ million				Percent			
WESTERN EUROPE	7,312	7,740	8,100	479	-1	6	5	-17
European Community (EC-12)	6,776	7,194	7,600	437	-1	6	6	-18
Belgium-Luxembourg	464	461	—	22	9	-1	—	-21
France	571	618	—	48	22	8	—	40
Germany	1,135	1,091	—	68	2	-4	—	-16
Italy	675	684	—	33	-4	1	—	-32
Netherlands	1,561	1,813	—	101	-5	16	—	-34
United Kingdom	883	882	—	69	16	0	—	11
Portugal	251	240	—	17	-26	-4	—	-2
Spain, incl. Canary Islands	855	951	—	48	-12	11	—	-39
Other Western Europe	536	546	500	42	9	2	0	-6
Switzerland	194	187	—	18	13	-4	—	8
EASTERN EUROPE	306	222	500	49	-36	-28	150	87
Poland	46	49	—	29	-54	6	—	516
Yugoslavia	74	50	—	4	-43	-32	—	-62
Romania	82	76	—	5	-61	-8	—	-22
Former USSR	1,758	2,691	1,900	220	-42	53	-30	-8
ASIA	16,094	17,782	17,400	1,526	-11	10	-2	-4
West Asia (Mideast)	1,430	1,770	1,900	190	-28	24	11	72
Turkey	224	344	—	45	-14	54	—	82
Iraq	0	0	0	0	-100	0	0	0
Israel, incl. Gaza & W. Bank	287	346	—	48	1	20	—	144
Saudi Arabia	536	549	400	42	7	2	-20	15
South Asia	375	536	—	26	-48	43	—	-32
Bangladesh	67	123	—	2	-44	83	—	-92
India	94	117	—	16	-19	24	—	117
Pakistan	144	226	200	1	-63	57	0	-4
China	668	691	400	46	-27	3	-43	-47
Japan	7,736	8,383	8,100	767	-5	8	-4	0
Southeast Asia	1,239	1,470	—	111	5	19	—	-23
Indonesia	279	353	—	31	1	27	—	-21
Philippines	373	443	500	34	6	19	25	-35
Other East Asia	4,646	4,934	4,900	386	-11	6	0	-13
Taiwan	1,739	1,916	1,900	177	-4	10	0	-5
Korea, Rep.	2,159	2,200	2,100	142	-20	2	-5	-26
Hong Kong	745	817	900	68	9	10	13	3
AFRICA	1,882	2,304	2,500	266	-6	22	9	18
North Africa	1,386	1,412	1,600	189	-9	2	14	17
Morocco	129	156	—	42	-21	21	—	349
Algeria	477	478	500	48	-3	0	0	-27
Egypt	692	709	700	81	-9	2	0	-4
Sub-Saharan	496	892	900	77	2	80	0	20
Nigeria	44	31	—	8	38	-30	—	212
Rep. S. Africa	74	328	—	34	-9	345	—	86
LATIN AMERICA & CARIBBEAN	5,499	6,438	6,700	605	7	17	5	2
Brazil	271	143	200	11	158	-47	100	61
Caribbean Islands	1,010	970	—	95	0	-4	—	19
Central America	498	587	—	53	8	18	—	27
Colombia	124	142	—	26	-16	14	—	99
Mexico	2,885	3,676	4,000	345	8	27	8	-13
Peru	150	179	—	7	-20	19	—	25
Venezuela	307	394	400	44	-11	28	0	48
CANADA	4,409	4,812	5,000	454	19	9	4	7
OCEANIA	349	428	400	31	10	23	0	5
TOTAL	37,609	42,417	42,500	3,631	-6	13	0	-2
Developed countries	20,106	21,969	22,200	1,809	2	9	1	-1
Developing countries	16,831	19,758	—	1,776	-14	17	—	-1
Other countries	672	691	—	46	-26	3	—	-47

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1992 began Oct. 1, 1991 & ended Sept. 30, 1992. F = forecast. — = not available.
 Note: Adjusted for transshipments through Canada.

Information contact: Stephen MacDonald (202) 219-0822.

Farm Income

Table 29.—Farm Income Statistics

	Calendar year										
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 F	1993 F
	\$ billion										
1. Farm receipts	141.9	147.7	150.1	140.0	148.5	158.2	169.2	177.1	174.8	176	174 to 184
Crops (incl. net CCC loans)	67.2	69.9	74.3	63.7	65.9	71.7	76.9	80.0	80.5	83	81 to 86
Livestock	69.6	72.9	69.8	71.6	76.0	79.4	84.1	89.9	86.7	86	86 to 90
Farm related 1/	5.1	4.9	6.0	5.7	6.6	7.1	8.2	7.2	7.6	7	6 to 8
2. Direct Government payments	9.3	8.4	7.7	11.8	16.7	14.5	10.9	9.3	8.2	9	8 to 12
Cash payments	4.1	4.0	7.6	8.1	6.6	7.1	9.1	8.4	8.2	9	8 to 12
Value of PIK commodities	5.2	4.5	0.1	3.7	10.1	7.4	1.7	0.9	0.0	0	0 to 1
3. Gross cash income (1+2) 2/	151.1	156.1	157.9	152.8	165.1	171.7	180.2	186.4	183.2	186	185 to 193
4. Nonmoney income 3/	13.6	5.9	5.6	5.5	5.6	6.1	6.2	6.1	5.9	6	6 to 7
5. Value of inventory change	-10.9	6.0	-2.3	-2.2	-2.3	-3.4	4.8	3.5	0.4	4	-3 to 1
6. Total gross farm income (3+4+5)	153.9	168.0	161.2	156.1	168.5	175.4	191.1	196.0	189.5	195	190 to 198
7. Cash expenses 4/	112.8	118.7	110.7	105.0	109.4	114.6	121.2	125.2	125.2	126	123 to 131
8. Total expenses	139.6	141.9	132.4	125.1	128.8	134.3	141.2	145.1	144.9	144	142 to 151
9. Net cash income (3-7)	38.4	37.4	47.1	47.8	55.8	58.1	58.9	61.3	58.0	60	57 to 67
10. Net farm income (6-8)	14.2	26.1	28.8	31.0	39.7	41.1	49.9	51.0	44.6	50	44 to 51
Dollared (1987\$)	16.3	28.7	30.5	32.0	39.7	39.5	46.0	45.1	37.9	42	35 to 41

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, & farm household expenses. Total may not add because of rounding. F = forecast.

Information contact: Robert McElroy (202) 219-0800.

Table 30.—Average Income to Farm Operator Households

	Calendar year					
	1988	1989	1990	1991	1992 F	1993 F
	\$ per operator household					
Farm income to household 1/	4,201	5,796	5,742	3,994	—	—
Self-employment farm income	3,836	4,723	4,973	2,716	—	—
Other farm income to household	364	1,073	768	1,278	—	—
Plus: Total off-farm income	28,829	26,223	33,265	32,549	—	—
Income from wages, salaries, and non-farm businesses	22,220	19,467	24,778	24,404	—	—
Income from interest, dividends, transfer payments, etc.	6,610	6,756	8,487	8,144	—	—
Equals: Farm operator household income	33,030	32,019	39,007	36,542	—	—

1/ Farm income to the household equals self-employment income plus amounts that operators pay themselves & family members to work on the farm, income from renting out acreage, & net income from a farm business other than the one being surveyed. Data for 1988-90 are based on surveys that did not fully account for small farms. Data for 1991 include an additional 350,000 farms, many with gross sales under \$10,000 & negative net farm incomes. F = forecasts, not available at this time.

Information contact: Janet Perry (202) 219-0807.

Table 31.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992F	1993 F
	\$ billion										
Assets											
Real estate	753.4	661.8	586.2	542.3	578.9	595.5	615.5	627.5	622.8	633	640 to 650
Non-real estate	189.8	195.2	186.5	182.1	193.7	205.4	213.4	219.0	218.3	223	210 to 220
Livestock & poultry	49.5	49.5	46.3	47.8	58.0	62.2	66.2	70.9	68.1	71	69 to 71
Machinery & motor vehicles	85.8	85.0	82.9	81.5	80.0	81.0	84.5	84.3	83.7	83	81 to 85
Crops stored 2/	23.6	26.1	22.9	16.3	17.5	23.3	23.4	22.8	23.6	24	22 to 26
Purchased inputs	—	2.0	1.2	2.1	3.2	3.5	2.6	2.8	2.6	3	2 to 4
Financial assets	30.9	32.6	33.3	34.5	35.1	35.4	36.8	38.3	40.3	42	41 to 45
Total farm assets	943.2	857.0	772.7	724.4	772.6	800.9	828.9	846.5	841.1	856	860 to 870
Liabilities											
Real estate debt 3/	103.2	106.7	100.1	90.4	82.4	77.6	75.4	73.7	74.4	76	74 to 78
Non-real estate debt 4/	87.9	87.1	77.5	66.6	62.0	61.7	61.8	63.1	64.3	64	64 to 68
Total farm debt	191.1	193.8	177.6	157.0	144.4	139.4	137.2	136.8	138.8	140	139 to 145
Total farm equity	752.2	663.3	595.1	567.5	628.2	661.6	691.8	709.8	702.3	716	720 to 730
	Percent										
Selected ratios											
Debt-to-assets	20.3	22.6	23.0	21.7	18.7	17.4	16.6	16.2	16.5	16	16 to 17
Debt-to-equity	25.5	29.2	29.8	27.7	23.0	21.1	19.8	19.3	19.8	20	19 to 21
Debt-to-net cash income	498	518	377	328	259	240	233	223	239	234	220 to 240

1/ As of Dec. 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 219-0798.

Table 32.—Cash Receipts From Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1991	1992	Mar 1993	Apr 1993	1991	1992	Mar 1993	Apr 1993	1991	1992	Mar 1993	Apr 1993
	\$ million 2/											
NORTH ATLANTIC												
Maine	252	244	27	25	192	195	22	23	445	439	49	49
New Hampshire	63	63	6	6	80	76	7	8	143	139	13	14
Vermont	368	400	31	32	66	66	8	12	433	466	38	44
Massachusetts	121	121	12	11	355	342	17	22	476	463	29	33
Rhode Island	13	13	1	1	58	58	5	6	71	71	6	7
Connecticut	209	201	23	23	255	240	19	25	463	441	42	47
New York	1,782	1,885	154	161	1,087	1,077	77	88	2,868	2,963	232	249
New Jersey	197	196	17	16	464	476	24	33	660	673	41	50
Pennsylvania	2,470	2,549	215	222	1,033	1,050	92	92	3,503	3,599	307	314
NORTH CENTRAL												
Ohio	1,681	1,608	129	140	2,212	2,310	169	107	3,893	3,917	298	248
Indiana	1,893	1,731	156	156	2,582	2,696	167	84	4,475	4,428	323	239
Illinois	2,344	2,221	192	192	5,165	5,524	406	242	7,509	7,745	598	434
Michigan	1,288	1,291	114	119	1,793	1,947	126	131	3,081	3,239	241	250
Wisconsin	4,215	4,434	355	381	1,234	1,226	64	58	5,449	5,660	418	438
Minnesota	3,577	3,519	308	325	3,359	3,464	237	129	6,936	6,983	545	453
Iowa	5,721	5,350	512	457	4,458	4,843	384	186	10,179	10,192	896	643
Missouri	2,203	2,109	196	190	1,658	1,959	128	60	3,861	4,068	324	250
North Dakota	699	685	70	53	1,857	2,368	154	134	2,556	3,053	223	187
South Dakota	2,176	2,068	188	209	1,088	1,243	71	50	3,264	3,312	258	260
Nebraska	5,934	5,786	395	393	2,888	3,085	252	129	8,821	8,872	646	523
Kansas	4,802	4,954	387	394	2,133	2,424	124	69	6,935	7,379	512	463
SOUTHERN												
Delaware	438	453	44	44	181	175	8	10	620	628	51	54
Maryland	779	831	70	70	554	573	48	47	1,332	1,404	118	118
Virginia	1,363	1,433	116	119	732	728	31	29	2,095	2,161	147	149
West Virginia	253	252	21	22	77	79	4	3	330	331	24	25
North Carolina	2,608	2,635	267	272	2,316	2,318	81	79	4,924	4,954	348	351
South Carolina	549	519	44	48	677	627	25	26	1,225	1,147	69	74
Georgia	2,153	2,122	217	219	1,825	1,795	66	66	3,978	3,916	283	284
Florida	1,172	1,139	102	95	4,969	4,678	464	791	6,141	5,816	565	886
Kentucky	1,704	1,652	113	116	1,475	1,619	66	28	3,179	3,271	179	144
Tennessee	1,045	1,028	90	81	933	1,062	46	34	1,978	2,090	136	115
Alabama	2,219	2,111	214	173	759	790	42	48	2,978	2,901	257	221
Mississippi	1,275	1,318	130	114	1,147	1,265	61	32	2,422	2,583	190	146
Arkansas	2,680	2,621	240	231	1,631	1,945	54	30	4,311	4,565	294	261
Louisiana	621	620	49	50	1,172	1,291	31	22	1,793	1,911	80	72
Oklahoma	2,767	2,668	271	257	1,040	1,144	38	48	3,808	3,812	309	305
Texas	7,914	7,870	677	879	4,212	4,159	183	195	12,126	12,028	859	1,074
WESTERN												
Montana	790	766	71	55	741	830	79	51	1,531	1,596	149	106
Idaho	1,073	1,109	107	106	1,543	1,620	113	113	2,616	2,730	220	219
Wyoming	643	620	45	43	170	167	6	4	813	787	51	48
Colorado	2,664	2,694	294	251	1,097	1,086	64	58	3,761	3,779	358	309
New Mexico	1,019	968	99	95	482	469	22	23	1,501	1,437	122	118
Arizona	786	823	88	80	1,104	940	135	41	1,890	1,764	222	120
Utah	553	583	44	45	178	192	15	24	731	775	59	69
Nevada	187	187	18	18	89	74	9	8	276	260	27	26
Washington	1,290	1,364	136	134	2,657	2,932	169	154	3,947	4,296	305	288
Oregon	824	826	61	63	1,631	1,697	91	92	2,454	2,524	152	155
California	5,272	5,258	429	446	12,615	12,838	809	1,186	17,887	18,095	1,237	1,632
Alaska	6	6	0	0	20	20	1	1	27	27	2	2
Hawaii	91	91	8	7	506	495	40	39	597	586	48	46
UNITED STATES	86,746	85,996	7,548	7,642	80,550	84,280	5,355	4,968	167,292	170,276	12,903	12,610

1/ Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 219-0806. To receive current monthly cash receipts via mail or E-Mail contact Linda Farmer at (202) 219-0804.

Table 33.—Cash Receipts From Farming

	Annual						1992		1993			
	1987	1988	1989	1990	1991	1992 P	Apr	Dec	Jan	Feb	Mar	Apr
	\$ million											
Farm marketings & CCC loans*	141,844	151,102	161,027	169,920	167,292	170,275	11,232	17,167	15,330	12,059	12,903	12,610
Livestock & products	75,993	79,438	84,148	89,921	86,745	85,998	6,637	7,984	6,619	7,049	7,548	7,642
Meat animals	44,478	46,492	48,857	51,911	51,093	48,988	3,792	4,806	3,603	4,242	4,344	4,365
Dairy products	17,727	17,641	19,396	20,210	18,114	19,709	1,588	1,631	1,580	1,403	1,618	1,734
Poultry & eggs	11,515	12,868	15,372	15,243	15,063	14,801	1,087	1,379	1,225	1,226	1,391	1,362
Other	2,274	2,437	2,524	2,557	2,476	2,497	168	168	210	179	195	181
Crops	65,851	71,663	76,879	79,999	80,547	84,280	4,595	9,184	8,711	5,009	5,355	4,968
Food grains	5,790	7,474	8,247	7,512	6,823	8,946	244	648	735	409	348	224
Feed crops	14,635	14,298	17,054	18,690	19,012	20,352	815	2,532	3,014	1,481	1,406	843
Cotton (lint & seed)	4,189	4,546	5,033	5,489	5,589	5,404	118	1,289	693	280	179	103
Tobacco	1,816	2,083	2,415	2,741	2,888	2,987	13	653	485	41	36	5
Oil-bearing crops	11,283	13,500	11,866	12,294	12,547	13,065	368	1,122	1,663	850	866	402
Vegetables & melons	9,898	9,788	11,534	11,455	11,293	11,235	1,103	561	825	674	1,004	1,596
Fruits & tree nuts	8,065	9,202	9,296	9,534	9,882	9,885	562	1,013	470	460	383	356
Other	10,176	10,772	11,435	12,284	12,514	12,426	1,374	1,365	826	813	1,133	1,439
Government payments	16,747	14,480	10,887	9,298	8,214	9,169	1,722	1,164	224	1,054	3,936	2,000
Total	158,591	165,582	171,914	179,218	175,506	179,338	12,954	18,331	15,554	13,113	16,839	14,610

* Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period. P = preliminary.

Information contact: Roger Strickland (202) 219-0806. To receive current monthly cash receipts via mail or E-Mail contact Linda Farmer at (202) 219-0804.

Table 34.—Farm Production Expenses

	Calendar year									
	1984	1985	1986	1987	1988	1989	1990	1991	1992F	1993F
	\$ million									
Feed purchased	19,383	16,949	17,472	17,463	20,393	21,002	20,706	19,800	20,000	18,000 to 22,000
Livestock & poultry purchased	9,487	9,184	9,758	11,842	12,764	13,138	14,832	14,358	14,000	12,000 to 16,000
Seed purchased	3,386	3,128	3,188	3,259	3,359	3,558	3,576	3,975	4,000	3,000 to 5,000
Farm-origin inputs	32,256	29,261	30,418	32,564	36,515	37,698	39,114	38,133	38,000	36,000 to 40,000
Fertilizer & lime	8,361	7,513	6,820	6,453	6,947	7,249	7,135	7,419	7,000	6,000 to 9,000
Fuels & oils	7,296	6,436	5,310	4,957	4,903	4,798	5,730	5,472	5,000	4,000 to 7,000
Electricity	2,060	1,878	1,795	2,156	2,289	2,543	2,480	2,483	2,000	1,000 to 3,000
Pesticides	4,688	4,334	4,324	4,512	4,577	5,437	5,730	6,313	7,000	6,000 to 8,000
Manufactured inputs	22,404	20,160	18,249	18,077	18,716	20,027	21,063	21,687	21,000	20,000 to 24,000
Short-term interest	10,396	8,735	7,367	6,767	6,797	6,910	6,911	6,615	6,000	5,000 to 8,000
Real estate interest 1/	10,733	9,878	9,131	8,187	7,885	7,781	7,607	7,319	7,000	6,000 to 8,000
Total interest charges	21,129	18,613	16,498	14,954	14,682	14,691	14,518	13,934	14,000	12,000 to 16,000
Repair & maintenance 1/	6,416	6,370	6,426	6,760	6,858	7,340	7,347	7,234	8,000	7,000 to 9,000
Contract & hired labor	9,427	10,008	9,484	9,975	10,441	11,110	12,541	12,595	13,000	10,000 to 14,000
Machine hire & custom work	2,566	2,354	2,099	2,105	2,354	2,682	2,633	2,722	3,000	2,000 to 4,000
Marketing, storage, & transportation	4,012	4,127	3,652	4,078	3,450	4,080	4,046	4,532	5,000	4,000 to 6,000
Misc. operating expenses 1/ 2/	10,331	10,010	9,759	11,171	11,791	12,522	12,364	13,256	13,000	10,000 to 14,000
Other operating expenses	32,751	32,868	31,420	34,089	34,894	37,734	38,931	40,339	41,000	39,000 to 44,000
Capital consumption 1/	20,847	19,299	17,788	17,092	17,344	17,780	17,494	17,352	17,000	16,000 to 20,000
Taxes 1/	4,337	4,542	4,612	4,853	4,848	5,127	5,623	5,980	6,000	5,000 to 7,000
Net rent to nonoperator landlord	8,150	7,690	6,099	7,124	7,290	8,187	8,334	7,464	8,000	7,000 to 9,000
Other overhead expenses	33,334	31,531	28,499	29,069	29,482	31,094	31,451	30,796	31,000	30,000 to 33,000
Total production expenses	141,873	132,433	125,084	128,772	134,285	141,244	145,077	144,889	145,000	146,000 to 148,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases, dairy assessments & feeding fees paid by nonoperators. Totals may not add because of rounding. F = forecast.

Information contacts: Chris McGath (202) 219-0804, Robert McElroy (202) 219-0800.

Table 35.—CCC Net Outlays by Commodity & Function

COMMODITY/PROGRAM	Fiscal year									
	1985	1986	1987	1988	1989	1990	1991	1992	1993 E	1994 E
	\$ million									
Feed grains										
Corn	4,403	10,524	12,346	8,227	2,863	2,450	2,387	2,105	5,250	3,180
Grain sorghum	463	1,185	1,203	764	467	361	243	190	423	274
Barley	336	471	394	57	45	-93	71	174	185	103
Oats	2	26	17	-2	1	-5	12	32	17	6
Corn & oat products	7	5	7	7	8	8	9	9	8	10
Total feed grains	5,211	12,211	13,967	9,053	3,384	2,721	2,722	2,510	5,883	3,573
Wheat	4,691	3,440	2,836	678	53	806	2,958	1,719	2,274	1,847
Rice	990	947	906	128	631	667	867	715	889	741
Upland cotton	1,553	2,142	1,786	666	1,461	-79	382	1,443	2,436	2,317
Tobacco	455	253	-346	-453	-367	-307	-143	29	-2	-13
Dairy	2,085	2,337	1,166	1,295	679	505	839	232	125	230
Soybeans	711	1,597	-476	-1,676	-86	5	40	-29	41	-40
Peanuts	12	32	8	7	13	1	48	41	33	1
Sugar	184	214	-65	-246	-25	15	-20	-19	-28	-30
Honey	81	89	73	100	42	47	19	17	17	12
Wool	109	123	152	1/ 5	93	104	172	191	183	191
Operating expense 3/	346	457	535	614	620	618	625	6	7	6
Interest expenditure	1,435	1,411	1,219	425	98	632	745	532	195	164
Export programs 4/	134	102	276	200	-102	-34	733	1,455	3,066	1,845
1989/92 Disaster/Tree/										
livestock assistance	0	0	0	0	3,919	2/ 161	121	1,054	1,226	0
Other	-314	486	371	1,665	110	609	2	-158	789	1,293
Total	17,683	25,841	22,408	12,461	10,523	6,471	10,110	9,738	17,134	12,137
FUNCTION										
Price-support loans (net)	6,272	13,628	12,199	4,579	-926	-399	418	584	2,183	785
Direct payments 5/										
Deficiency	6,302	6,166	4,833	3,971	5,798	4,178	6,224	5,491	8,813	7,009
Diversion	1,525	64	382	8	-1	0	0	0	0	0
Dairy termination	0	489	587	260	168	189	96	2	0	0
Loan Deficiency	0	27	60	0	42	3	21	214	390	438
Other	0	0	0	0	0	0	0	140	200	175
Disaster	0	0	0	6	4	0	0	0	0	0
Total direct payments	7,827	6,746	5,862	4,245	6,011	4,370	6,341	5,847	9,403	7,622
1988-92 crop disaster	0	0	0	0	3,386	2/ 5	6	960	1,137	0
Emergency livestock/tree/										
forage assistance	0	0	0	31	533	156	115	94	89	0
Purchases (net)	1,331	1,670	-479	-1,131	116	-48	646	321	335	298
Producer storage										
payments	329	485	832	658	174	185	1	14	19	67
Processing, storage,										
& transportation	657	1,013	1,659	1,113	659	317	394	185	135	128
Operating expense 3/	346	457	535	614	620	618	625	6	7	6
Interest expenditure	1,435	1,411	1,219	425	98	632	745	532	195	164
Export programs 4/	134	102	276	200	-102	-34	733	1,455	3,066	1,845
Other	-648	329	305	1,727	-46	669	86	-260	565	1,222
Total	17,683	25,841	22,408	12,461	10,523	6,471	10,110	9,738	17,134	12,137

1/ Fiscal 1988 wool & mohair program outlays were \$130,635,000 but include a one-time advance appropriation of \$126,108,000, which was recorded as a wool program receipt by Treasury. 2/ Approximately \$1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates & were not recorded directly as disaster assistance outlays. 3/ Does not include CCC Transfers to General Sales Manager. 4/ Includes Export Guarantee Program, Direct Export Credit Program, CCC Transfers to the General Sales Manager, Market Promotion Program, starting in fiscal 1991 & starting in fiscal 1992 the Export Guarantee Program - Credit Reform, Export Enhancement Program, & Dairy Export Incentive Program. 5/ Includes cash payments only. Excludes payment-in-kind in fiscal 83-85 & generic certificates in fiscal 86-93. E = Estimated in the fiscal 1994 Budget which was released April 8, 1993 based on November 1992 supply & demand estimates. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdalski (202) 720-5148.

Food Expenditures

Table 36.—Food Expenditures

	Annual			1993			1993 year-to-date		
	1990	1991	1992	Apr	May P	June P	Apr	May P	June P
\$ billion									
Sales 1/									
Off-premise use 2/	298.1	310.9	319.0	26.8	27.7	27.3	103.8	131.5	158.8
Meals & snacks 3/	225.3	232.6	242.1	21.1	21.7	21.9	79.3	101.0	122.9
1992 \$ billion									
Sales 1/									
Off-premise use 2/	308.3	313.2	318.9	26.2	27.0	26.8	101.5	128.5	155.3
Meals & snacks 3/	237.6	237.3	242.0	20.8	21.4	21.5	78.3	99.7	121.2
Percent change from year earlier (\$ bil.)									
Sales 1/									
Off-premise use 2/	8.9	4.3	2.6	2.8	1.6	2.2	2.0	1.9	1.9
Meals & snacks 3/	7.2	3.3	4.1	7.0	3.4	8.7	2.6	2.8	3.8
Percent change from year earlier (1992 \$ bil.)									
Sales 1/									
Off-premise use 2/	2.3	1.6	1.8	0.9	-1.7	-0.2	-0.1	-0.4	-0.4
Meals & snacks 3/	2.4	-0.1	2.0	5.1	1.6	6.8	0.8	1.0	1.9

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted. 2/ Excludes donations & home production. 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & inmates. P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food nonalcoholic beverages & 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 & consumed on farms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," Agr. Econ. Rpt. No. 575, Aug 1987.

Information contact: Alden Manchester (202) 219-0880.

Transportation

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

	Annual			1992		1993				
	1990	1991	1992	May	Dec	Jan	Feb	Mar	Apr	May
Rail freight rate index 1/ (Dec. 1984=100)										
All products	107.5	109.3	109.9	110.0	110.3	110.5	110.4 P	110.6 P	110.6 P	110.6 P
Farm products	110.4	111.4	111.1	110.3	113.4	113.4	113.0 P	113.5 P	113.5 P	113.3 P
Grain	110.1	111.2	111.4	110.5	114.4	114.4	113.9 P	114.5 P	114.5 P	114.2 P
Food products	105.4	108.1	108.7	109.4	108.7	108.7	108.7 P	108.9 P	108.8 P	108.7 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	27.6	26.6	27.3	20.5	29.7 P	29.6 P	30.7 P	30.1 P	28.0 P	24.7
Barge shipments (mil. ton) 3/	3.8	3.3	3.4	4.1	2.9	2.0	1.7	3.0	2.5	3.7
Fresh fruit & vegetable shipments 4/ 5/										
Piggy back (mil. cwt)	1.8	1.5	1.6	2.3	1.4	1.4	1.4	1.6	1.4	1.9
Rail (mil. cwt)	2.3	2.1	2.6	3.5	3.0	2.5	2.2	2.8	2.0	3.0
Truck (mil. cwt)	41.5	41.9	44.0	55.7	41.1	40.8	39.1	44.0	48.2	57.2
Cost of operating trucks hauling produce 4/										
Fleet operation (cts./mile)	130.5	126.5	124.1	123.8	125.1	127.0	127.0	127.0	127.0	127.3

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Shipments on Illinois & Mississippi waterways, U.S. Corps of Engineers. 4/ Agricultural Marketing Service, USDA. 5/ Preliminary data for 1993. P = preliminary. — = not available.

Information contact: T.Q. Hutchinson (202) 219-0840.

Indicators of Farm Productivity

Table 38.—Indexes of Farm Production, Input Use & Productivity 1/

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 2/
	1977=100									
Farm output	116	96	112	118	111	110	102	114	119	120
All livestock products 3/	107	109	107	110	110	113	116	116	118	119
Meat animals	101	104	101	102	100	102	105	105	104	104
Dairy products	110	114	110	117	116	116	118	117	120	121
Poultry & eggs	119	120	123	128	133	144	148	153	162	168
All crops 4/	117	88	111	118	109	108	92	107	114	111
Feed grains	122	67	116	134	123	106	73	108	112	106
Hay & forage	109	100	107	106	106	102	89	101	102	103
Food grains	138	117	129	121	107	107	98	107	136	104
Sugar crops	96	93	95	97	106	111	105	105	107	112
Cotton	85	55	91	94	69	103	107	86	109	122
Tobacco	104	75	90	81	63	62	72	71	84	87
Oil crops	121	91	106	117	110	108	89	106	107	114
Cropland used for crops	101	88	99	98	94	88	87	90	90	89
Crop production per acre	116	100	112	120	116	123	106	119	127	125
Farm input 5/	98	96	95	91	89	89	87	87	88	—
Farm real estate	102	101	99	97	96	95	94	93	93	—
Mechanical power & machinery	89	86	85	80	77	74	74	73	71	—
Agricultural chemicals	118	102	120	115	109	111	112	119	122	—
Feed, seed, & livestock purchases	107	103	103	102	109	116	111	113	113	—
Farm output per unit of input	119	100	118	129	124	124	116	130	135	—
Output per hour of labor										
Farm 6/	125	99	121	139	139	142	135	147	142	—
Nonfarm 7/	99	102	105	106	108	109	111	112	111	—

1/ For historical data & indexes, see Economic Indicators of the Farm Sector: Production & Efficiency Statistics, 1986, ECIFS 5-6. 2/ Preliminary indexes for 1991 based on Crop Production: 1991 Summary, released in January 1992, & unpublished data from the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Economic Research Service. 7/ Bureau of Labor Statistics. — = not available.

Information contact: Eldon Ball (202) 219-0432.

Food Supply & Use

Table 39.—Per Capita Consumption of Major Food Commodities ^{1/}

Commodity	1985	1986	1987	1988	1989	1990	1991	1992 P
Pounds								
Red meats 2/3/4/	124.9	122.2	117.4	119.5	115.9	112.4	111.9	114.1
Beef	74.6	74.4	69.6	68.6	65.4	64.0	63.1	62.8
Veal	1.5	1.6	1.3	1.1	1.0	0.9	0.8	0.8
Lamb & mutton	1.1	1.0	1.0	1.0	1.1	1.1	1.1	1.0
Pork	47.7	45.2	45.6	48.8	48.4	46.4	46.9	49.5
Poultry 2/3/4/	45.2	47.1	50.7	51.7	53.6	55.9	58.0	60.0
Chicken	36.1	37.0	39.1	39.3	40.5	42.1	43.9	45.9
Turkey	9.1	10.2	11.6	12.4	13.1	13.8	14.1	14.2
Fish & shellfish 3/	15.0	15.4	16.1	15.1	15.6	15.0	14.8	—
Eggs 4/	32.7	32.5	32.5	31.5	30.2	29.9	29.8	30.0
Dairy products								
Cheese (excluding cottage) 2/5/	22.5	23.1	24.1	23.7	23.8	24.7	24.9	26.0
American	12.2	12.1	12.4	11.5	11.0	11.2	11.1	11.3
Italian	6.5	7.0	7.6	8.1	8.5	9.0	9.4	—
Other cheese 6/	3.9	4.0	4.1	4.1	4.3	4.6	4.6	—
Cottage cheese	4.1	4.1	3.9	3.9	3.6	3.4	3.3	3.1
Beverage milks 2/	229.7	228.6	226.5	222.4	224.3	221.7	221.5	—
Fluid whole milk 7/	123.4	116.5	111.9	105.7	97.6	90.4	87.5	—
Fluid lowfat milk 8/	93.7	98.6	100.6	100.5	106.5	108.4	110.1	—
Fluid skim milk	12.6	13.5	14.0	16.1	20.2	22.9	23.8	—
Fluid cream products 9/	6.7	7.0	7.1	7.1	7.3	7.1	7.0	—
Yogurt (excluding frozen)	4.1	4.4	4.4	4.7	4.3	4.1	4.3	—
Ice cream	18.1	18.4	18.4	17.3	16.1	15.8	16.3	16.4
Ice milk	6.9	7.2	7.4	8.0	8.4	7.7	7.4	7.1
Frozen yogurt	—	—	—	—	2.0	2.8	3.5	3.1
All dairy products, milk equivalent, milkfat basis 10/	593.8	591.5	601.3	582.9	565.2	571.3	565.3	563.8
Fats & oils — Total fat content	64.3	64.4	62.9	63.0	60.4	62.2	63.5	65.6
Butter & margarine (product weight)	15.7	16.0	15.2	14.8	14.6	15.3	14.8	15.2
Shortening	22.9	22.1	21.4	21.5	21.5	22.2	22.4	22.4
Lard & edible tallow (direct use)	3.7	3.5	2.7	2.6	2.1	2.5	3.1	4.1
Salad & cooking oils	23.5	24.2	25.4	25.8	24.0	24.2	25.2	25.6
Fresh fruits 11/	86.8	93.1	97.5	97.4	98.8	92.6	90.6	—
Canned fruit 12/	12.7	12.9	13.6	13.2	13.4	13.4	12.3	—
Dried fruit	2.9	2.8	3.1	3.3	3.2	3.6	3.2	—
Frozen fruit	3.3	3.6	3.9	3.8	4.6	4.3	3.9	—
Selected fruit juices 13/	66.9	65.0	69.7	64.9	67.6	56.9	64.1	—
Vegetables 11/								
Fresh	100.7	99.3	105.8	109.7	112.9	110.9	106.0	108.1
Canning	87.8	87.9	87.6	83.5	90.7	93.4	94.3	93.9
Freezing	17.1	15.8	16.8	18.3	17.8	18.3	19.3	17.5
Potatoes, all 11/	122.5	125.8	125.8	122.3	127.4	127.8	130.6	132.6
Sweetpotatoes 11/	5.4	4.4	4.4	4.1	4.1	4.6	4.0	4.2
Peanuts (shelled)	6.3	6.4	6.4	6.9	7.0	6.0	6.5	6.4
Tree nuts (shelled)	2.3	2.3	2.2	2.3	2.3	2.5	2.5	—
Flour & cereal products 14/	156.1	162.1	170.8	173.7	175.5	183.5	185.4	187.0
Wheat flour	124.7	125.7	130.0	130.0	129.6	135.8	136.5	138.3
Rice (milled basis)	9.0	11.6	14.0	14.3	15.2	16.2	16.8	16.8
Caloric sweeteners 15/	131.3	129.6	133.7	135.1	137.3	140.7	141.7	143.3
Coffee (green bean equiv.)	10.5	10.5	10.2	9.8	10.1	10.3	10.5	10.6
Cocoa (chocolate liquor equiv.)	3.7	3.8	3.8	3.8	4.0	4.3	4.6	4.6

1/ In pounds, retail weight unless otherwise stated. Consumption normally represents total supply minus exports, nonfood use, & ending stocks. Calendar-year data except fresh citrus fruits, peanuts, tree nuts, & rice, which are on crop-year basis. 2/ Total 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/ Natural equivalent of cheese & cheese & other dairy products. Includes miscellaneous cheese not shown separately. 6/ Includes Swiss, Brick, Munster, cream, Neufchatel, Blue, Gorgonzola, Edam, & Gouda. 7/ Plain & flavored. 8/ Plain & flavored & buttermilk. 9/ Heavy cream, light cream, half & half, & sour cream & dip. 10/ Includes condensed & evaporated milk & dry milk products. 11/ Farm weight. 12/ Excludes pineapples & berries. 13/ Single strength equivalent. 14/ Includes rye, corn, oat, & barley products. Excludes quantities used in alcoholic beverages, corn sweeteners, & fuel. 15/ Dry weight equivalent. — not available. P = Preliminary.

Information contact: Judy Jones Putnam (202) 219-0862.

United States
Department of Agriculture
1301 New York Avenue, NW
Washington, DC 20005-4789

OFFICIAL BUSINESS

Penalty for Private Use, \$300

MOVING? To change your address, send this sheet with label intact, showing new address to: EMS Information, Rm 228, 1301 New York Ave., NW, Washington, DC 20005-4789

FIRST CLASS
POSTAGE & FEES PAID
USDA
PERMIT NO. G-145

☒ **Want to Subscribe?** ☒ **Time to Renew?**

Subscribe to **Agricultural Outlook** today! If you already subscribe to this timely periodical, note that expiration information about your subscription appears on the top line of your mailing label. **The expiration information will appear in one of three formats:** 1-AGO-2 (this means you have TWO issues remaining in your subscription) or 940430 (expiration date is April 30, 1994) or APR94 (expiration date is April 1994). Disregard this notice if no renewal information appears. **Call toll free, 1-800-999-6779**, and tell us whether you want to subscribe or renew, or return this form to: **ERS-NASS, 341 Victory Drive, Herndon, VA 22070.**

Agricultural Outlook

☐ Yes! I want to **start** my subscription.

☐ Yes! I want to **renew** my subscription.

	1 Year	2 Years	3 Years
Domestic:	<input type="checkbox"/> \$35.00	<input type="checkbox"/> \$68.00	<input type="checkbox"/> \$101.00
Foreign:	<input type="checkbox"/> \$43.75	<input type="checkbox"/> \$85.00	<input type="checkbox"/> \$126.25

New subscribers:

Name: _____

Address: _____

City, State, Zip: _____

Daytime phone: (____) _____

Renewals:

ATTACH MAILING LABEL HERE

Payment method:

☐ Bill me.

☐ Enclosed is \$_____.

Use purchase orders, checks drawn on U.S. banks (and in U.S. funds), cashier's checks, or international money orders. **Make payable to ERS-NASS.** Please do not send cash.

Credit card orders: ☐ MasterCard ☐ Visa Total charges \$_____.

Credit card
number:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Card expiration
date:

--	--

Month/Year

For fastest service, call our toll-free order desk 1-800-999-6779, in the U.S. and Canada; other areas please call 703-834-0125, or FAX this page to 703-834-0110.