

United States  
Department of  
Agriculture

World  
Agricultural  
Outlook  
Board

Staff Report  
WAOB-93-1

# Long-term Agricultural Baseline Projections

Interagency Agricultural Projections Committee

### **Abstract**

This report provides long-run projections for the U.S. agricultural sector, focusing on 1995 through 2000. These "baseline" projections represent one plausible long-run scenario for the latter half of the 1990s, and reflect a composite of model results and judgmental analysis. The projections are a conditional, current law scenario with no shocks and are based on specific assumptions regarding the macroeconomy, the weather, and international developments. Baseline projections are provided for selected program and nonprogram commodities as well as for aggregate indicators such as farm income and food prices. Long-run baseline projections are used in the U.S. Department of Agriculture to support ongoing activities such as budget reviews and farm program administration and management. Additionally, they provide a point of departure for discussion of alternative policy scenarios.

**Keywords:** baseline, projections, commodity programs, crops, livestock.

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## A Note to Users of USDA Baseline Projections

Baseline projections presented in this report are a Departmental consensus on a representative long-run scenario for the latter half of the 1990s. This report is the first of a planned annual release of Departmental long-term projections for the agricultural sector. The baseline projections in this report were prepared in conjunction with the Mid-Session Review in June 1993, based on policy decisions and other information available at that time. Future projections reports will follow release of the President's Budget rather than the Mid-Session Review. The next baseline projections report is currently planned for the winter of 1995.

The baseline scenario presented in this report is not a USDA forecast about the future. Instead, it is a conditional, long-run scenario about what would be expected to happen under current agricultural law and specific assumptions about external conditions that are discussed throughout the document. Critical assumptions are made about:

- U.S. agricultural and trade policies;
- Funding for U.S. agricultural export programs;
- Foreign economic, agricultural, and trade policies;
- U.S. and international macroeconomic conditions;
- Growth rates of agricultural productivity, both in the U.S. and abroad; and
- Normal (average) weather.

Changes in any of the assumptions could significantly alter the projections, and actual conditions that emerge will alter the outcomes.

The baseline analysis was made by interagency committees in USDA and reflects a composite of model results and judgmental analysis. The projections and this report were reviewed and cleared by the Interagency Agricultural Projections Committee, chaired by James R. Donald, Chairperson of the World Agricultural Outlook Board. Agencies participating in the baseline analysis and the baseline review include the World Agricultural Outlook Board, the Agricultural Stabilization and Conservation Service, the Economic Research Service, the Foreign Agricultural Service, the Economic Analysis Staff, the Office of Budget and Program Analysis, the Agricultural Marketing Service, the Federal Crop Insurance Corporation, and the Soil Conservation Service.

Questions regarding these projections may be directed to Paul Westcott, Economic Research Service, U.S. Department of Agriculture, Room 1012, 1301 New York Avenue, N.W., Washington, D.C. 20005-4788, phone: (202) 219-0313; or David Stallings, U.S. Department of Agriculture, World Agricultural Outlook Board, Room 5143 South Building, Washington, D.C. 20250-3800, phone: (202) 720-5715.

# LONG-TERM AGRICULTURAL BASELINE PROJECTIONS

## Interagency Agricultural Projections Committee

### Introduction

This report provides long-run projections for the U.S. agricultural sector, focusing on the years 1995 through 2000. These "baseline" projections represent one plausible long-run scenario for the latter half of the 1990s, and reflect a composite of model results and judgmental analysis. The projections are a conditional, current law scenario with no shocks and are based on specific assumptions regarding the macroeconomy, the weather, and international developments. Thus, the baseline projections are not intended to be a forecast of what the future will be, but instead a description of what would be expected to happen with current agricultural law and with very specific external circumstances.

Baseline projections are provided for selected program and nonprogram commodities as well as for aggregate indicators of the sector, such as farm income and food prices. Long-run baseline projections are used internally by the U.S. Department of Agriculture (USDA) to support ongoing Departmental activities such as budget reviews and farm program administration and management. Additionally, baseline projections provide a point of departure for discussion of alternative scenarios, particularly for agricultural policy analyses, such as farm bill alternatives and U.S. export-related scenarios.

The baseline projections in this report were prepared in June 1993, based on policy decisions and other information available at that time. The projections do not reflect agricultural policy changes subsequently made in August 1993 by the enactment of the Omnibus Budget Reconciliation Act of 1993 and the Emergency Supplemental Appropriations Act of 1993. Additionally, except for cotton, trade data underlying the crop projections do not reflect trade between countries of the former Soviet Union.

Normal weather is assumed for the baseline. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use. Thus, the projections in this report begin in 1995 and focus on the latter half of the 1990s. Two years of history (as of June 1993) are also provided. Projections for 1993/94 are published each month in the *World Agricultural Supply and Demand Estimates* report. The first USDA short-term crop projections for crop year 1994/95 will be released in May 1994.

## Summary of Projections

Under a continuation of agricultural legislation as of June 1993 and with no external shocks to the farm sector from the macroeconomy, weather, or international developments, U.S. agriculture is projected to continue to have some excess capacity although the balance between productive capacity and projected demands tightens. The move toward greater market orientation in agriculture that began with the Food Security Act of 1985 and continued with 1990 farm legislation (the Food, Agriculture, Conservation, and Trade Act, or FACT, and the Omnibus Budget Reconciliation Act of 1990) is assumed to continue, gradually reducing the Government's influence in the sector through traditional commodity programs. This results in an economically more efficient agricultural sector that responds more to signals from the marketplace and less to Government commodity program decisions.

In the crops sector, productive capacity is projected to rise due to increases in resource and input use and in productivity. For most crops, yields are projected to rise at or near their long-term trends. Reflecting, in part, the assumption that the Conservation Reserve Program (CRP) is not extended when contracts expire, land used for crop production increases as some CRP land returns to production. Also, generally lower annual Acreage Reduction Program (ARP) levels contribute to increased land being used for crops. Domestic demand for crops is projected to grow slowly, largely reflecting gains in population. Thus, long-run demand growth for crops depends primarily on export markets. Funding for export promotion, credit assistance, and food aid programs continues to have a significant role in determining export gains. Developing countries are a major source of export demand growth as their economic conditions and effective demand are expected to improve. Developments in China, the former Soviet Union, and Eastern Europe also have important implications for determining world trade and U.S. exports. Moderate increases in nominal prices for crops are projected in the latter half of the 1990s although the return of some CRP land to production limits price gains for grains and soybeans. Real prices for crops continue their long-term downward trend.

Record meat supplies are projected to continue for the rest of the decade, reflecting moderate feed prices, small increases in other production costs, and ample forage supplies. Consumers purchase more meat, but a larger proportion is poultry. The long-term decline in the real price of meats continues. Declining real prices along with increases in real disposable income allow consumers to buy more meat with a smaller proportion of disposable income.

In the baseline scenario, net farm income is relatively constant in nominal terms at about \$4 billion below the 1992 record of \$48.7 billion. Real net farm income declines. Much of the decline in real net farm income is due to lower Government payments as market prices rise and target prices are assumed to remain at current levels. With Government payments falling, the agriculture sector increasingly relies on the marketplace for its income. Both crop and livestock receipts are up in nominal terms, due to larger production and higher prices. Crop receipts fall in real terms while real livestock receipts are nearly constant. Production expenses also increase in nominal terms, but are nearly flat in real terms.

A steady farm economy and relatively low interest rates mean a small improvement in the financial condition of the farm sector. The farm credit system has largely recovered from the problems of the 1980s, so the availability of credit will not be a major concern. Farm assets are projected to increase at near the rate of inflation in the second half of the 1990s, with farm debt growing somewhat slower, thus lowering debt-to-asset and debt-to-equity ratios. The trend toward fewer but larger farms is expected to continue. Off-farm income will continue to be the primary source of average farm operator household incomes.

Retail food prices are projected to rise less than the general inflation rate, continuing a long-term trend. Expenditures for meals eaten away from home account for a growing share of food spending.

### **Assumptions**

The baseline scenario is guided by the specific assumptions made about the U.S. and world economy. The domestic farm sector is also partially guided by agricultural policy assumptions, based on agricultural law as of June 1993.

#### **Macroeconomic Assumptions**

The macroeconomic assumptions are based on trend values assumed for some indicators combined with traditional relationships among macroeconomic variables. The resulting projections follow broad trends in the economy without arbitrarily introducing business cycles.

The remainder of the 1990s is projected to be a period of moderate U.S. economic growth, low inflation, and stable interest rates. Following a moderate economic recovery in 1993 and 1994, economic growth settles down at about 2.8 percent annually for the rest of the 1990s, reflecting improvement in productivity and gains in the quality and quantity of the labor force.

Fiscal policy is assumed to be relatively tight to conform to the broad outlines of the February 1993 Presidential budget proposal. Monetary policy is assumed to continue containing inflation; the consumer price index increases at an average rate of 3.4 percent during the second half of the 1990s. The trade-weighted exchange value of the dollar is assumed to be constant in real terms for 1995 through 2000.

Oil price assumptions are based on a composite of short-run and long-run projections from the U.S. Department of Energy. In real terms, refiner acquisition costs for imported crude oil are assumed to rise about 3.5 percent annually from 1995 to 2000.

In the baseline scenario, short-term interest rates increase during 1995-2000, with 3-month Treasury bill rates rising to near 5 percent. Long-term Treasury bond rates remain relatively stable through 2000.

The labor force is projected to grow about 1.2 percent annually in the baseline. The unemployment rate falls from over 6 percent in 1995 to 5.2 percent in 2000. Productivity gains of 1.6

percent a year partly offset wage increases, limiting growth in unit labor costs and helping to contain inflation.

Foreign macroeconomic recovery is projected over the next few years although growth will be historically low for a recovery. World economic growth is expected to be more robust during 1995 through 2000, as many industrial countries will have come out of recessions and developing countries will continue improvement. Large population gains in developing countries will push their economic growth over 5 percent annually, above the growth rate of near 3 percent projected for developed countries. Reduced debt levels and lower inflation in developing countries will improve their prospects for economic growth. In particular, Latin American economies will benefit from reforms that have opened their economies to trade and competition and improved investment and capital inflows. Strong economic growth is expected to continue for China. Growth prospects for countries of the former Soviet Union and Eastern Europe will improve in the second half of the 1990s, following further short-term economic contraction as they adjust from centrally planned to market economies.

### **Agricultural Policy Assumptions**

Baseline projections assume a continuation of agricultural legislation as of June 1993. Policy assumptions reflect provisions of the Agricultural Act of 1949, as amended by the FACT, the Omnibus Budget Reconciliation Act of 1990, and the FACT Act Amendments of 1991. Notably, this baseline does not reflect agricultural policy changes made in August 1993 by the enactment of the Omnibus Budget Reconciliation Act of 1993 and the Emergency Supplemental Appropriations Act of 1993. Individual program provisions shown in the baseline--for example, for annual acreage reduction programs--do not indicate future USDA policy decisions. Where legislation authorizes discretion, program provisions are based on the judgement of commodity analysts, guided by farm legislation where appropriate. Some important U.S. agricultural policy assumptions are made:

- Annual commodity program provisions are set so that carryover stocks or stocks-to-use ratios are maintained at levels determined or guided by agricultural legislation.
- Target prices are assumed to continue at current levels, the minimum levels permitted by farm legislation.
- Payment yields for program crops remain fixed through the baseline projection period.
- Payment acreage is reduced by 15 percent of base acreage under 1990 legislation. In addition, farmers have planting options on 25 percent of their base through flexibility provisions, and on more of their base through provisions such as zero certification, minor oilseeds plantings on 0/92 acreage, and dried peas and lentils plantings on as much as 20 percent of wheat and feed grains crop acreage bases.
- For 1995 through 2000 crops, deficiency payments for wheat and feed grains are based on the lower of the 12-month season average price or the 5-month price plus 10 cents for



wheat and 7 cents for feed grains. For 1995 through 2000 rice crops, deficiency payments are based on the lower of the 12-month calendar-year average price or the 5-month price plus an amount fair and equitable in relation to wheat and feed grains. Deficiency payments for upland cotton are based on a calendar-year average price.

- Loan rates for wheat and feed grains for 1995 through 2000 are set at the minimum levels allowed under the 1990 FACT.
- Marketing loans are in effect for wheat and feed grains starting with 1993 crops, under the first GATT trigger provisions. Wheat and feed grain marketing loans are assumed to be implemented in a manner to minimize costs to the Government. Marketing loan programs are also in effect for rice, upland cotton, and oilseeds.
- A minimum \$10.10 per hundredweight milk price support is established with an assessment on marketings.
- Domestic marketing allotments for sugar are assumed to be implemented when projected sugar imports are less than 1.25 million short tons.
- Marketing assessments are implemented for many non-target price commodities, including sugar and tobacco.
- The Environmental Conservation Acreage Reserve Program moves 40 million acres to conserving uses by the mid-1990s. Land enrolled in this program includes CRP acreage and 1 million acres in the Wetlands Reserve Program. This land becomes available for production consideration when contracts expire, most after 10 years, with market price incentives determining how much actually is used for production.
- Funding for the Export Enhancement Program (EEP) is assumed to be \$1.250 billion annually. Credit assistance provided by the GSM program is assumed to continue at current levels. Moderate increases in funding for food aid under the P.L. 480 program are assumed.

The baseline projections also make several important international agricultural policy assumptions. The trade policy assumptions are not USDA forecasts of the future international policy environment, but reflect consistency with the assumption of a continuation of agricultural legislation as of June 1993. Thus, pending issues or legislation, such as the North American Free Trade Agreement (NAFTA), are not included in the assumptions; their final form is unknown. Key international agricultural policy assumptions include EC common agricultural policy (CAP) reform, no NAFTA, and no multilateral GATT agreement for agricultural trade liberalization; countries adopt only those policy reforms that they would adopt unilaterally.

Projections developed under these assumptions provide USDA with a baseline scenario for subsequent departmental analysis of alternative agricultural policy assumptions, such as adoption of NAFTA and passage of GATT.

**Table 1. Domestic macroeconomic baseline assumptions**

Item	Unit	Selected history 1/							
		1991	1992	1995	1996	1997	1998	1999	2000
<b>GDP</b>									
Nominal	Bill. dollars	5,678	5,951	7,082	7,512	7,978	8,467	8,989	9,540
Real	Bill. 1987 dollars	4,821	4,923	5,383	5,536	5,691	5,848	6,013	6,180
Percent change	Percent	-1.2	2.1	3.1	2.8	2.8	2.8	2.8	2.8
<b>Disposable personal income</b>									
Nominal	Bill. dollars	4,210	4,431	5,293	5,622	5,985	6,371	6,781	7,220
Percent change	Percent	4.1	5.1	6.2	6.2	6.5	6.4	6.4	6.5
Nominal per capita	Bill. dollars	16,658	17,346	20,144	21,196	22,358	23,586	24,887	26,271
Percent change	Percent	3.0	4.1	4.9	5.2	5.5	5.5	5.5	5.6
Real	Bill. 1987 dollars	3,509	3,585	3,900	4,010	4,124	4,243	4,367	4,494
Percent change	Percent	-0.2	2.2	2.6	2.8	2.9	2.9	2.9	2.9
Real per capita	Bill. 1987 dollars	13,886	14,035	14,845	15,116	15,406	15,709	16,026	16,353
Percent change	Percent	-1.3	1.1	1.6	1.8	1.9	2.0	2.0	2.0
<b>Inflation measures</b>									
GDP deflator	1987=100	117.8	120.9	131.6	135.7	140.2	144.8	149.5	154.4
Percent change	Percent	4.1	2.6	3.0	3.1	3.3	3.3	3.2	3.3
Consumer price index	1982-84 = 100	136.3	140.4	154.2	159.3	164.9	170.6	176.4	182.5
Percent change	Percent	4.3	3.0	3.2	3.3	3.5	3.5	3.4	3.4
Producer prices, finished goods	1982=100	121.7	123.2	132.9	137.3	141.9	146.6	151.4	156.4
Percent change	Percent	2.1	1.2	3.2	3.3	3.4	3.3	3.3	3.3
Producer prices, crude goods	1982=100	101.2	100.4	111.6	115.7	120.0	124.4	129.0	133.8
Percent change	Percent	-7.0	-0.8	4.0	3.7	3.7	3.7	3.7	3.7
<b>Crude oil price</b>									
Refiner acquisition costs, imports	Dollars per barrel	18.7	18.2	21.7	23.0	24.6	26.3	28.1	30.1
Percent change	Percent	-14.1	-2.7	10.9	6.2	7.0	6.9	6.8	7.1
Real cost	1987 doll. per barrel	16.7	15.1	16.5	17.0	17.5	18.2	18.8	19.5
Percent change	Percent	-13.3	-10.0	7.7	3.0	3.5	3.5	3.5	3.7
<b>Labor compensation per hour</b>									
Nonfarm businesses	1982=100	145	150	171	178	187	196	205	215
Percent change	Percent	5.1	3.6	4.4	4.6	4.8	4.7	4.7	4.7
<b>Interest rates</b>									
3 month T-bills	Annual percent	5.4	3.5	3.9	4.2	4.4	4.5	4.7	4.9
6 month comm. paper	Annual percent	5.9	3.8	4.5	4.7	5.0	5.1	5.3	5.5
Bank prime rate	Annual percent	8.5	6.3	6.6	6.8	7.0	7.1	7.3	7.4
Treasury bonds	Annual percent	7.9	7.0	6.5	6.4	6.4	6.5	6.6	6.7
Moody's Aaa bonds	Annual percent	8.8	8.2	7.3	7.2	7.2	7.3	7.5	7.6
<b>Civilian unemployment rate</b>									
Civilian unemployment rate	Percent	6.8	7.4	6.3	6.0	5.8	5.7	5.5	5.2
<b>Nonfarm payroll employment</b>									
Nonfarm payroll employment	Millions	108.3	108.4	115.4	118.0	120.4	122.9	125.4	128.0
Percent change	Percent	-1.3	0.1	2.3	2.2	2.1	2.1	2.1	2.1
<b>Money supply, M2</b>									
Money supply, M2	Bill. dollars	3,407	3,477	3,800	3,970	4,141	4,317	4,501	4,692
Percent change	Percent	3.3	2.1	4.5	4.5	4.3	4.3	4.3	4.3
<b>Exchange rates, Federal Reserve Board weighted-average index</b>									
Nominal	March 1973 = 100	89.7	86.6	96.0	97.0	97.9	98.9	99.7	100.3
Real	March 1973 = 100	86.5	83.3	90.6	90.6	90.6	90.6	90.6	90.6
<b>Total population</b>									
Total population	Millions	252.7	255.4	262.8	265.3	267.7	270.1	272.5	274.8

1/ Historical data as of June 1993.

Note: All real variables measured in 1987 dollars, except where noted.

**Table 2. Foreign real GDP baseline growth assumptions, percent change**

	Selected history 1/		1995	1996	Average 1997-2001
	1991	1992			
World growth less United States	1.8	1.1	3.7	3.8	3.9
Developing economies	1.1	1.5	5.7	5.6	5.6
Africa	2.1	0.8	3.3	3.2	3.5
Asia	5.6	7.1	7.1	7.1	7.0
Latin America	3.0	2.0	4.5	4.5	4.4
Middle East	-1.1	7.0	7.3	6.8	5.1
Central Europe	-10.0	-16.7	2.1	2.7	4.2
Algeria	4.0	1.0	4.5	4.8	5.7
Argentina	5.1	5.9	3.4	3.0	3.0
Brazil	0.9	-1.0	5.6	4.5	4.5
China	7.0	12.8	8.2	8.0	8.0
Egypt	2.3	3.0	3.7	3.8	3.7
Former Soviet Union	-8.6	-20.0	2.0	2.4	4.9
India	1.3	3.4	5.5	5.5	5.2
Iran	6.2	6.0	4.3	4.5	4.5
Iraq	-55.9	8.1	25.1	20.0	5.3
Mexico	3.6	2.7	4.7	5.9	5.6
Pakistan	6.5	5.6	6.3	6.6	6.6
Saudi Arabia	13.1	4.6	9.0	8.0	5.7
South Korea	8.4	4.6	8.2	8.1	7.8
Taiwan	7.3	6.6	6.9	7.0	7.4
Thailand	8.2	7.5	8.3	8.0	7.8
Turkey	1.5	5.2	4.5	4.6	4.5
Developed economies less the United States	2.1	0.9	2.8	3.0	3.0
Australia	-1.2	2.2	2.9	2.9	2.9
Canada	-1.7	0.9	3.7	3.4	3.1
Japan	4.4	1.5	3.4	3.7	3.7
European Community	1.6	0.8	2.5	2.6	2.6
France	1.1	1.6	2.7	2.7	2.4
Germany	3.6	0.5	2.5	2.6	2.8
Italy	1.6	0.9	2.3	2.5	2.5
United Kingdom	-2.1	-0.6	2.6	2.8	2.7

1/ Historical data as of June 1993.

Sources: Project LINK, Oxford Economics, DRI Inc., and USDA/ERS.

**Table 3. Summary baseline policy variables**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
	Dollars							
Target prices								
Corn	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
Sorghum	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61
Barley	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36
Oats	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Wheat	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Rice	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71
Upland cotton	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729
Loan rates								
Corn	1.62	1.72	1.58	1.57	1.57	1.62	1.63	1.63
Sorghum	1.54	1.63	1.50	1.49	1.49	1.54	1.55	1.55
Barley	1.32	1.40	1.29	1.28	1.28	1.32	1.33	1.33
Oats	0.83	0.88	0.81	0.81	0.81	0.83	0.84	0.84
Wheat	2.04	2.21	2.21	2.10	2.06	2.06	2.11	2.13
Rice	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Upland cotton	0.508	0.524	0.501	0.500	0.500	0.500	0.502	0.516
Soybeans	5.02	5.02	5.02	5.02	5.02	5.02	5.02	5.02
Milk support	10.10	10.10	10.10	10.10	10.35	10.35	10.60	10.60
	Percent							
Acreage Reduction Program								
Corn	7.5	5	0	0	0	0	0	0
Sorghum	7.5	5	0	0	0	0	0	0
Barley	7.5	5	0	0	0	0	0	0
Oats	0	0	0	0	0	0	0	0
Wheat	15	5	0	0	0	0	0	0
Rice	5	0	0	0	0	0	0	0
Upland cotton	5	10	15	12.5	12.5	12.5	15	15
Participation rate								
Corn	76.5	75.7	80	80	79	80	80	80
Sorghum	77.1	78.6	78	79	78	78	75	75
Barley	75.9	75.1	78	79	79	80	80	75
Oats	37.9	40.4	42	42	42	44	45	45
Wheat	85.4	83.2	87	86	86	85	85	85
Rice	95.0	96.4	96	96	96	96	96	96
Upland cotton	83.5	88.9	86	87	87	86	86	86

1/ Historical data as of June 1993.

Baseline projections assume a continuation of agricultural law as of June 1993. Individual program provisions shown do not indicate future USDA policy decisions where discretion is authorized.

## Crops

Agricultural legislation as of June 1993, which is assumed to extend through 2000 in this baseline, continues the emphasis on greater market orientation for agriculture that began with the 1985 FACT. Market returns are more important in determining what crops are planted because farmers now receive Government payments on a smaller proportion of their program acres. Further, program participants have more planting flexibility, allowing them to respond to market signals in their planting decisions.

Nonetheless, farm programs will continue to have a significant role in the crop sector through the rest of the 1990s. With target prices fixed, deficiency payment rates stay high enough to keep net returns for farm program participants higher than for nonparticipants. As a result, enrollment in annual farm commodity programs remains high for most program crops.

### Land Use

Overall, total acreage planted or idled, including the CRP, for the 7 major program crops (feed grains, wheat, rice, and cotton) and soybeans falls from 297 million acres in 1995 to about 291 million acres in 2000. But to meet increasing demand, planted acreage for these 8 crops rises from about 254 million acres in 1995 to about 265 million acres by 2000.

The CRP will have important effects on the crops sector in the latter half of the 1990s. The baseline assumes that 40 million acres are enrolled in the CRP under 10-year contracts. Nearly 29 million acres of the CRP land comes from program crops and soybeans. Land enrolled in the CRP is unavailable for production for the duration of the CRP contract. Starting in 1996, however, the 10-year CRP contracts begin to expire, freeing the enrolled land for production consideration. The largest amounts of acreage leaving the CRP occur in 1997 and 1998. Smaller amounts of CRP land are released in years after 1998. Base acreage in the CRP returns to the effective acreage base when its contract expires and most is assumed to be used in a base-preserving activity. However, part of the returning CRP land is not used for production, instead being used to comply with acreage reduction programs, enrolled in 0/92 or 50/92 programs, or left idle.

Under planting flexibility provisions, about 7 to 8.5 million acres are flexed out of target-price program crops annually, on net, in 1995 through 2000. Much of the flexed acreage is planted to soybeans. This level of net flex reflects the nature of a baseline which assumes no supply or demand shocks.

### Crop Supply and Demand Overview

For most crops, yields are projected to rise at or near their long-term trends. Combined with larger plantings of cropland, crop production rises through the rest of the decade. Excess productive capacity remains, however. Some acreage will continue to be kept out of production through annual acreage reduction programs. Also, use of 0/92 and 50/92 programs will rise, especially following expiration of CRP contracts.

Domestic demand for crops will grow moderately from 1995 through 2000, with population growth the major reason. Increased industrial use of corn to produce ethanol is assumed to help meet standards established in the Clean Air Act Amendments of 1990. Feed demands rise mostly due to increases in livestock inventories. Domestic food use of wheat increases faster than population growth in part due to dietary concerns. Strong increases in domestic food use of rice are projected. Domestic use of cotton rises slightly faster than population gains, largely reflecting steady macroeconomic growth.

With only moderate gains in domestic demand projected in the baseline, long-run demand growth for crops will depend heavily on export markets. Funding for export promotion, credit assistance, and food aid programs continue to play a significant role. Developing countries account for the largest gains in U.S. exports. Developments in the former Soviet Union and Eastern Europe will also have important implications for determining world trade and U.S. exports.

As crop demands increase through the rest of the 1990s, nominal prices generally rise although real prices decline. Increased land availability when CRP contracts expire results in generally steady prices for grains and soybeans during the latter part of the decade. However, with less CRP acreage returning in subsequent years, prices begin moving upward again by 2000. With target prices fixed, increasing productivity helps balance production cost increases, keeping participant returns net of variable expenses relatively stable in nominal terms for most crops, although real returns fall.

Domestic production of all fruit rises about 2 percent annually from 1995 through 2000. This largely reflects increased orange production as a large number of nonbearing and young bearing trees move toward full bearing potential in the 1990s. Fewer young apple trees will enter their commercially productive years in the late-1990s, limiting apple production gains to less than 1 percent a year. Vegetable production, driven by strong consumer demand, is expected to rise slightly faster than the growth in population from 1995 to 2000. Consumer awareness of the importance of fruits and vegetables in a healthy diet and declining real prices contribute to an increase in domestic per capita fruit and vegetable consumption.

Sugar production rises from 1995 to 2000, with beet sugar gains accounting for two-thirds of the increase. Stable market shares between sugar and high fructose corn syrup contribute to sugar use rising slightly more than population growth from 1995 to 2000. Domestic marketing allotments for sugar may be needed in some years to keep estimated imports from falling below 1.25 million tons. Grower prices for sugarbeets and sugarcane show little change through 2000.

Tobacco production falls from 1995 to 2000 because of continuing declines in domestic cigarette consumption, slower growth in exports of cigarettes, and increased competition in global tobacco markets.

## **Feed Grains**

Fixed target prices keep program participation rates high for corn, sorghum, and barley in the 1990s despite a widening gap between actual yields and fixed program yields. Acreage reduction programs of zero percent are assumed from 1995 onward for all feed grains. A zero percent acreage reduction program for oats was mandated in the 1990 Farm Act.

Nearly 4 million acres of CRP land return to the corn effective acreage base by 2000 as 10-year contracts begin expiring in 1996. Because this land is assumed to be of relatively low productivity, part of it is enrolled in the 0/92 program, which increases from 2.5 million acres in 1995 to 3.7 million acres in 2000.

Corn plantings rise from 79.5 million acres in 1995 to 82 million acres by 2000. Some corn land is switched to soybeans under planting flexibility provisions, while the minor feed grains also lose some land to other crops. Overall, flex acreage shifting out of feed grains annually exceeds that shifting into feed grain production, by about 5 to 5.5 million acres during 1995 to 2000. Annual gains in yields for corn are projected at 1.5 bushels an acre.

Increased demand for ethanol is assumed to help meet standards established in the Clean Air Act Amendments of 1990, contributing to the increase in corn food, seed, and industrial use. Projected gains in feed demand for corn largely reflect increases in livestock inventories.

Corn exports increase by about one-fifth in the second half of the 1990s, with the U.S. share of world coarse grain trade growing steadily. World trade and U.S. exports of coarse grains are projected to grow faster in the 1990s than in the 1980s, but will remain below the substantially higher rates of the 1970s.

Global import growth for coarse grains will be concentrated in developing countries. Imports by the former Soviet Union, the world's largest coarse grains importer during much of the 1980s, are projected to decline, limited by financial weakness and reduced levels of meat production. Korea and Taiwan are projected to continue strong growth in imports, reflecting strong economic growth and increased feed demand. Saudi Arabia, the world's largest barley importer, is projected to reduce its imports in response to increasing domestic production, because of a policy decision to shift some irrigated acreage from wheat to barley. Mexico's imports are projected to increase steadily, even in the absence of NAFTA, because of projected strong economic growth. However, most of this growth is expected in sorghum, with corn imports staying relatively low without NAFTA. Japan's coarse grain imports will decline slightly because of the impact of rising meat imports. However, Japan will remain the world's largest coarse grain importer.

Aggregate competitor exports of coarse grains decline with a sharp contraction by the EC, where CAP reform reduces coarse grain area and increases domestic feed use. China's exports are projected to decline as additional feed use by their growing livestock sector reduces exportable corn supplies. Current policy reforms in Argentina are expected to support increases in production, improve competitiveness, and boost exports. Argentina's exports are projected to increase steadily, and Argentina will surpass China as the largest foreign corn exporter. Australia

and Canada are projected to experience flat to moderate growth in exports, because of weak market prospects for barley, the main export for each. Gains in exports by Eastern Europe are projected, due to rising production in the face of stagnant domestic use, and the region is projected as a net exporter. Market reforms, particularly changes in the price system, account for slow consumption growth. The increase in Eastern Europe's exports will depend on the region's ability to ship to markets other than the former Soviet Union (FSU), their main traditional market.

U.S. corn prices remain in a narrow range of \$2.20 in 1995 to \$2.30 in 2000 as the sector adjusts to the return of land to the effective acreage base from the CRP. Participant returns above variable costs remain above those received by nonparticipants, keeping program participation high.

## **Wheat**

Program participation rates for wheat remain high as fixed target prices keep returns to program participants well above those for nonparticipants. Acreage reduction programs of zero percent are used in the baseline scenario from 1995 through the remainder of the 1990s.

As for feed grains, wheat CRP land reenters the effective acreage base beginning in 1996 as 10-year CRP contracts expire. Over 10 million acres of wheat land leave the CRP between 1995 and 2000. Not all of the returning land is planted to wheat as some is enrolled in the 0/92 program and some is left idle. Wheat acreage idled under the 0/92 program rises about 4 million acres from 1995 to 2000.

Acreage planted to wheat increases about 5 million acres from 1995, reaching nearly 77 million acres by 2000. On net, 2 to 2.5 million acres of wheat base are flexed to other crops in each year. Gains in yields are projected at 0.2 bushels an acre annually.

Domestic food use of wheat exceeds population growth in part due to dietary concerns that encourage increased consumption of fiber. Feed use of wheat remains within a range of 280 to 300 million bushels annually.

U.S. wheat exports increase 14 percent between 1995 and 2000. As for coarse grains, world trade and U.S. exports of wheat are projected to grow faster in the 1990s than in the 1980s, although remaining below the substantially higher rates of the 1970s. The U.S. share of world wheat trade is projected to remain near one-third.

Global import growth for wheat occurs primarily in developing countries. Much of the developing country import gain is driven by population growth, although per capita incomes will also rise. Larger imports are projected in the developing regions of Latin America, North Africa/Middle East, and Sub-Saharan Africa. U.S. and other exporter credit and assistance programs will continue to be important to many of the countries. Lower livestock inventories will cut feed use of wheat in the FSU. Higher prices, more high quality wheat, lower post-harvest losses, and policy changes that increase the quantity of milling-quality wheat also are expected to reduce FSU wheat imports. Reforms in Eastern Europe are expected to lead to slower



production and consumption growth, reduced feed use of wheat, and reduced wheat imports. China's wheat imports are projected to trend upward as domestic wheat production grows more slowly than during the 1980s.

CAP reform is projected to have comparatively less impact on EC wheat exports than EC coarse grain exports. EC wheat production growth slows because of CAP reform. Reduced area and declining real prices in the Community mean input cutbacks and slower growth of yields. EC feed use of wheat grows, absorbing some of the increase in production. But EC wheat exports still rise, with EC world market share remaining flat through 2000. Exports from Canada, Australia, and Argentina are projected to grow only slightly during 1995 to 2000.

Wheat prices in the U.S. are projected to range from \$2.85 to \$3.05 during 1995 to 2000. Net returns for program participants exceed those for nonparticipants, keeping participation in the wheat program high.

## Rice

Target prices are well above market prices, keeping rice program participation rates at 96 percent from 1995 through 2000. Acreage reduction programs for rice are assumed at 0 percent for the rest of the decade. Rice plantings remain near 3.1 million acres. The stable level of plantings primarily reflects the 0-percent acreage reduction level, flat enrollment in the 50/92 program, and a fairly constant level of acres flexed out of rice. Rice yields are projected to grow only slightly for the remainder of the decade.

Much of the increase in U.S. rice production is used domestically, reflecting higher food use in processed and frozen foods, in restaurants, and by growing Asian and Hispanic populations.

U.S. rice exports gradually decline from 1995 to 2000. Global rice trade accelerates in the 1990s from the rate of the 1980s, but the United States does not share in these gains, as production remains stagnant and domestic consumption rises. The U.S. share of global rice trade declines to under 15 percent by 2000. The gap between world rice prices and domestic prices widens, reducing the competitiveness of U.S. rice in global markets.

Global rice import growth will be fueled by the needs of the Middle East, Africa, and Brazil. Import growth in other developing countries also is projected, although gains depend on availability of credit and other export assistance. Middle Eastern import demand for rice is projected to grow steadily on the strength of population growth coupled with high per capita consumption levels. Many oil-rich Middle Eastern countries have projected population growths in excess of 3 percent per annum. Brazil's import demand is projected to remain strong during 1995 through 2000, driven by population increases and strong economic growth. Nigeria and nations in Other Sub-Saharan Africa are projected to show strong growth in import demand on the strength of rapidly growing populations. Imports of rice by industrialized countries continue growing at a slow pace.

Much of the increase in world rice imports will be supplied by Thailand and Vietnam. Thailand responds to rising world import demand and higher prices with larger acreage and increasing yields to generate higher exportable supplies, gaining world market share. Growth in exports from Vietnam will be constrained by limited increases in arable land combined with already high levels of input use. Burma's revival of its second crop rice, principally destined for export markets, will allow it to expand rice exports through 2000. Pakistan's limited acreage base prevents any increase in exportable supplies. Improved production in Latin American countries leads to higher exports, with most being intra-Latin American, to Brazil, Peru, and Mexico from Uruguay, Argentina, and Paraguay. Market reforms in China are expected to decrease the amount of exportable low-quality rice supplies, while also decreasing the need for imports of high-quality rice. Production in China is expected to shift away from high-yielding, low-quality varieties of Indica rice and towards lower-yielding, but higher-quality varieties of both Indica and Japonica rice in response to market forces. In the EC-12, strong domestic demand and limited expansion from current production suggest declining exportable rice supplies.

Domestic rice prices rise from under \$6.00 a hundredweight in 1995 to about \$6.65 by 2000, while world rice prices are projected to rise gradually from 1995 to 2000. The price differential between world and domestic prices ranges from \$1.30 to \$1.50 over this period.

### **Upland Cotton**

Acreage reduction programs for upland cotton are projected to range from 12.5 to 15 percent between 1995 and 2000. Program participation rates remain near 85 percent as deficiency payment rates continue to remain attractive.

Upland cotton planted area remains in a narrow range of 12.5 to 12.8 million acres. Cotton gains a small amount of acreage under planting flexibility. Annual gains in yields for upland cotton are projected at 10 pounds per acre.

Growth in domestic use of upland cotton from 1995 to 2000 is supported by generally favorable macroeconomic conditions. U.S. exports of upland cotton are projected to rise moderately, although growth is slower than in the 1980s. Growth in global cotton trade is projected to be below the gains of the 1980s, as foreign producing countries reduce raw cotton exports by channeling production toward domestic consumption and value-added textile exports. Also, foreign production growth will be constrained by continued competition from food and feed crops for arable land, particularly among large Asian and Euro-Asian producers. Overall, the U.S. share of world cotton trade is likely to remain stable in the second half of the 1990s.

Cotton trade will be influenced by the continuing shift of textile export production to the lowest cost countries. Traditional textile manufacturers encounter increasingly intense competition from cost efficient producers. Global cotton imports are expected to pick up in the latter part of the 1990s as declining consumption in traditional importing countries slows or stabilizes and the rapid consumption growth in emerging cotton importers continues. In the traditional cotton importers--Japan, South Korea, Taiwan, Hong Kong, and the EC--consumption is expected to decline due to strong competition from emerging Asian textile suppliers and comparative

production disadvantages. Indonesia and Thailand will continue rapid consumption and import expansion as they benefit from comparatively cheap labor, favorable exchange rates, and foreign investment in their textile industries. Eastern European countries will increase consumption and imports of cotton in the second half of the 1990s, but gains will be from a much lower level than historically.

Foreign exports of raw cotton are projected to grow moderately. Australia, the French-speaking countries of West Africa, and Paraguay continue to channel the vast majority of their output into the export market throughout the period. Pakistan is expected to limit raw cotton exports because of its rapidly expanding domestic consumption. India, with much potential for yield improvement, is expected to raise exports moderately. However, as with Pakistan, India's export growth will be limited by strong growth in domestic consumption. The Central Asian Republics of the former Soviet Union continue exporting cotton, especially to countries paying in convertible currencies, in order to finance economic development. China is expected to retain its status as a slight net exporter of cotton. Some traditional cotton exporters, such as Brazil, Mexico, Turkey, and Egypt, are expected to reduce cotton exports while increasing imports to meet more rapidly expanding consumption needs.

## **Soybeans**

Soybean acreage increases from 62 to 63 million acres from 1995 to 2000. Soybean yields are projected to rise 0.3 to 0.4 bushels an acre each year.

Increases in soybean crushings are primarily due to underlying growth in domestic soybean meal demand, reflecting an increasing domestic livestock sector. U.S. soybean exports rise in response to increases in global demand. However, soybean meal export gains are smaller than for soybeans as increased South American trade competition reduces the U.S. trade share. Soybean oil exports decline toward the end of the decade, as global supplies of competing oils remain abundant.

The EC continues to be a net importer of oilseeds and dominates the world market for both soybean and soybean meal imports. Under CAP reform, total EC oilseed production declines, reducing the availability of vegetable oil and leading to a change in the traditional import mix more toward soybeans. The FSU and Eastern Europe will continue to be importers of soybean meal, although FSU imports continue to be heavily dependent of availability of credit and other export assistance. FSU import demand for protein meals is expected to favor soybean meal over bean imports as capital constraints inhibit investment in new crushing facilities. Successful implementation of reform programs and an expansion of economic growth in the latter half of the 1990s are projected to stimulate import demand. Growth of soybean meal imports into Eastern Europe resume during the 1995 to 2000 period after adjustments to economic reforms. Japan is expected to reduce its imports of both soybeans and soybean meal as increased market liberalization for livestock products is anticipated to pressure Japanese livestock production and demand for imported protein meal. Soybean imports by Korea and Taiwan are forecast to increase during 1995 to 2000. Import demand for soybean meal is expected to expand rapidly in the ASEAN countries, notably the Philippines, Indonesia, and Thailand, as their livestock sectors continue to develop.

Slower export growth of soybeans and soybean meal is expected from the major South American competitors of Brazil and Argentina as production growth slows in those countries. Domestic policies in Argentina and Brazil will continue to favor soybean meal exports over soybean exports. China is projected to reduce the volume of both bean and meal exports as an increasing share of total soybean availability will be used to meet the growing demands of their livestock sector. India will continue to increase meal exports.

U.S. soybean prices range from \$5.80 to \$5.95 a bushel during the latter half of the 1990s. Nominal returns to soybean production over variable costs encourage some program crop flex acreage to shift to soybeans. Domestic soybean meal prices (48 percent protein) range between \$185 and \$190 per short ton. Domestic soybean oil prices remain in a 20 to 22 cent range.

### **Fruit and Vegetables**

The fruit sector will expand faster than population growth through 2000, led by rapid growth in orange production. Projected orange production rises rapidly due to the large number of nonbearing and young bearing trees moving toward mature production potential. Projected apple production rises at a slower rate as fewer young trees are entering full-bearing age because of a low rate of planting during the late 1980s.

Rapid growth in orange output will depress grower prices for several years. In addition, rising world production of frozen concentrated orange juice will keep downward pressure on orange prices. Projected producer prices for all fruit rise about 1.2 percent annually from 1995 to 2000. Retail prices will rise at a slightly slower pace than the increase in the CPI because a large part of the retail price for fruits is made up of marketing costs, which tend to move closely with general inflation.

Projected U.S. imports of all fruits are nearly level from 1995 to 2000, as declines in orange juice imports, caused by the big increase in domestic orange production, offset gains for other fruits. U.S. exports of all fruits increase as domestic production rises at a faster pace than consumption and real prices decline, boosting the competitiveness of U.S. fruit in world markets.

Production of all vegetables is projected to rise at a rate somewhat faster than population growth from 1995 to 2000. Increased consumer awareness of the importance of vegetables in a healthy diet and declining real prices cause domestic per capita consumption to rise.

The projected producer price index for all vegetables rises at a slower pace than increases in the CPI, reflecting rising productivity in the production sector. Prices for potatoes, sweet potatoes, and dry edible beans also are projected to increase less than the rise in the general price level. Retail prices rise at near the rate of growth in the CPI reflecting the importance of marketing costs in the retail price.

Projected imports of all vegetables rise faster than exports. Imports of winter season fresh vegetables will continue to increase as will imports of frozen vegetables. Increased exports of

processed potato products (mostly frozen french fries) push potato exports upward. Potato and dry bean exports rise at a somewhat faster pace than the increase in exports of all vegetables.

## **Sugar**

Cane sugar acreage is projected to grow slightly from 1995 to 2000, but cane yields are flat. Beet acreage rises slowly with gradual gains in beet yields. Cane and beet sugar recovery rates trend upwards very slowly due to technical improvements.

Per capita sugar disappearance rises about a pound from 1995 to 2000. The rapid substitution of corn sweeteners for sugar ended about 1986, and use of sugar is now growing at about the same rate as use of high fructose corn syrup, slightly above the population growth rate. Sugar is expected to continue to benefit from an industry campaign to promote its "naturalness," and from increased public emphasis on the negative nutritional aspects of fats, but not carbohydrates.

The projections indicate that domestic marketing allotments may be needed in some years to keep estimated sugar imports from falling below the minimum statutory level of 1.25 million tons. Over-allotment sugar may be carried into the next fiscal year, but cannot be sold in the U.S. sweetener market in the current year.

From 1995 to 2000, the stocks-to-use ratio for sugar is projected at 14.5 percent, and the raw sugar price is 21.80 cents a pound. Grower prices for sugarbeets and sugarcane derive from the raw sugar price, which is based on a cane sugar loan rate of 18 cents a pound, raw value. The sugarbeet price includes lower returns on beet sugar surplus disposed of on the world market when allotments are in effect.

## **Tobacco**

U.S. tobacco production is projected to drop from 1995 to 2000. Burley production will rise slightly from 1995 and then level off by 1998, while flue-cured production declines. Tobacco yields remain constant in these baseline projections because poundage quotas diminish incentives to raise production per acre. Prices for U.S. grown tobacco rise in line with increases in the support price.

Domestic use of flue-cured tobacco will steadily decline because of falling domestic cigarette sales, slower growth in cigarette exports, and substitution of lower quality and less expensive imported leaf for domestic leaf. Flue-cured leaf exports decline somewhat, reflecting increased competition in global markets from countries such as Zimbabwe and Brazil and declining cigarette consumption in some key markets.

Domestic burley use will gradually fall as cigarette sales decline and foreign-grown burley is substituted for domestic production. Burley leaf exports will increase through 2000 because of the demand for high-quality U.S. burley for blending in foreign countries. Increased competition from countries such as Malawi and Zimbabwe, however, will limit export growth.

**Table 4. Planted, harvested, and idled acreage for major crops, baseline projections**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
	Million acres							
Planted acreage, 8 major crops								
Corn	76.0	79.3	79.5	80.0	81.5	81.5	81.5	82.0
Sorghum	11.1	13.3	11.6	11.7	12.2	12.4	12.4	12.5
Barley	8.9	7.6	7.7	7.7	8.1	8.4	8.7	8.8
Oats	8.7	8.0	5.5	5.3	5.5	5.7	5.7	5.8
Wheat	69.9	72.3	72.0	72.5	74.1	75.3	76.3	76.9
Rice	2.9	3.2	3.1	3.1	3.1	3.1	3.1	3.1
Upland cotton	13.8	13.0	12.5	12.8	12.8	12.8	12.8	12.8
Soybeans	59.2	59.3	62.0	62.3	62.5	62.5	63.0	63.0
Total	250.5	256.0	253.9	255.4	259.8	261.7	263.5	264.9
Harvested acreage, 8 major crops								
Corn	68.8	72.1	72.3	72.8	74.3	74.3	74.3	74.8
Sorghum	9.9	12.2	10.4	10.5	10.9	11.1	11.1	11.2
Barley	8.4	7.3	7.1	7.1	7.5	7.8	8.0	8.1
Oats	4.8	4.5	4.2	4.0	4.2	4.4	4.6	4.6
Wheat	57.7	62.4	62.6	63.1	64.5	65.5	66.4	66.9
Rice	2.8	3.1	3.1	3.1	3.0	3.0	3.0	3.0
Upland cotton	12.7	10.9	11.5	11.8	11.8	11.8	11.8	11.8
Soybeans	58.0	58.4	60.9	61.2	61.4	61.4	61.9	61.9
Total	223.1	230.9	232.1	233.6	237.6	239.3	241.1	242.4
Idled acreage, ARP, 8 major crops								
Corn	4.7	3.1	0.0	0.0	0.0	0.0	0.0	0.0
Sorghum	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Barley	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Oats	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wheat	10.1	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Rice	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upland cotton	0.6	1.3	2.0	1.7	1.7	1.6	2.0	2.0
Soybeans	---	---	---	---	---	---	---	---
Total	17.1	8.6	2.0	1.7	1.7	1.6	2.0	2.0
Idled acreage, 0/92, 50/92, 8 major crops								
Corn	2.7	2.2	2.5	2.3	2.9	3.1	3.5	3.7
Sorghum	1.7	1.5	1.5	1.5	1.9	2.2	2.5	2.6
Barley	1.5	1.9	2.0	2.0	2.4	2.7	3.0	3.2
Oats	0.6	0.7	0.7	0.7	0.9	1.0	1.1	1.2
Wheat	5.8	4.0	5.0	5.3	6.8	8.0	8.4	8.9
Rice	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Upland cotton	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Soybeans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	13.4	11.1	12.5	12.6	15.7	17.8	19.3	20.4

--- Not applicable.

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 5. Conservation reserve, total acreage, and flexibility shifts for major crops, baseline projections**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
Million acres								
Conservation Reserve Program acreage, 8 major crops								
Corn	3.9	4.1	4.6	4.8	2.6	2.1	1.6	1.2
Sorghum	2.4	2.4	2.5	2.3	1.3	0.7	0.3	0.1
Barley	2.8	2.8	3.0	3.0	2.1	1.3	0.7	0.4
Oats	1.3	1.4	1.5	1.4	1.0	0.6	0.4	0.2
Wheat	10.4	10.6	11.2	10.6	7.0	4.1	2.4	0.9
Rice	—	—	—	—	—	—	—	—
Upland cotton	1.3	1.4	1.5	1.5	0.9	0.6	0.3	0.2
Soybeans	3.8	4.0	4.3	4.3	2.6	1.5	1.2	0.8
Total	25.9	26.7	28.6	27.9	17.5	10.9	6.9	3.8
Total acreage, with CRP, 8 major crops								
Corn	87.3	88.7	86.6	87.1	87.0	86.7	86.6	86.9
Sorghum	16.0	17.7	15.6	15.5	15.4	15.3	15.2	15.2
Barley	13.9	12.7	12.7	12.7	12.6	12.4	12.4	12.4
Oats	10.6	10.1	7.7	7.4	7.4	7.3	7.2	7.2
Wheat	96.2	90.2	88.2	88.4	87.9	87.4	87.1	86.7
Rice	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Upland cotton	16.3	16.1	16.3	16.3	15.7	15.3	15.4	15.3
Soybeans	63.0	63.3	66.3	66.6	65.1	64.0	64.2	63.8
Total	306.9	302.3	297.0	297.6	294.7	292.1	291.7	291.1
Total acreage, without CRP, 8 major crops								
Corn	83.4	84.6	82.0	82.3	84.4	84.6	85.0	85.7
Sorghum	13.6	15.3	13.1	13.2	14.1	14.6	14.9	15.1
Barley	11.1	9.9	9.7	9.7	10.5	11.1	11.7	12.0
Oats	9.3	8.7	6.2	6.0	6.4	6.7	6.8	7.0
Wheat	85.8	79.6	77.0	77.8	80.9	83.3	84.7	85.8
Rice	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Upland cotton	15.0	14.7	14.8	14.8	14.8	14.7	15.1	15.1
Soybeans	59.2	59.3	62.0	62.3	62.5	62.5	63.0	63.0
Total	281.0	275.7	268.4	269.7	277.2	281.1	284.8	287.3
Planting flexibility net acreage shifts								
Corn	-3.1	-2.7	-3.8	-4.0	-4.1	-4.1	-4.4	-4.4
Sorghum	-0.4	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Barley	-0.3	-0.6	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6
Oats	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Wheat	-1.3	-1.5	-2.0	-2.0	-2.2	-2.2	-2.3	-2.5
Rice	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Upland cotton	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Total	-5.4	-5.5	-6.9	-7.2	-7.7	-7.8	-8.2	-8.4

1/ Historical data as of June 1993.

—Less than 50,000 acres.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 6. Corn baseline projections**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
<b>Program variables:</b>								
ARP (percent)	7.5	5.0	0	0	0	0	0	0
Participation (percent)	76.5	75.7	80	80	79	80	80	80
<b>Acreage (million acres):</b>								
Idled ARP acres	4.7	3.1	0.0	0.0	0.0	0.0	0.0	0.0
0/92 acres	2.7	2.2	2.5	2.3	2.9	3.1	3.5	3.7
CRP acres	3.9	4.1	4.6	4.8	2.6	2.1	1.6	1.2
Flexed acres (net)	-3.1	-2.7	-3.8	-4.0	-4.1	-4.1	-4.4	-4.4
Total planted acres	76.0	79.3	79.5	80.0	81.5	81.5	81.5	82.0
Total harvested acres	68.8	72.1	72.3	72.8	74.3	74.3	74.3	74.8
<b>Yields (bushels per acre):</b>								
Yield/harvested acre	108.6	131.4	125.5	127.0	128.5	130.0	131.5	133.0
Program yield	104.6	105.4	105.0	105.0	105.0	105.0	105.0	105.0
<b>Supply and use (million bushels):</b>								
Beginning stocks	1,521	1,100	1,798	1,803	1,728	1,808	1,848	1,823
Imports	20	4	5	5	5	5	5	5
Production	7,475	9,479	9,075	9,245	9,550	9,660	9,770	9,950
Supply	9,016	10,583	10,878	11,053	11,283	11,473	11,623	11,778
Feed & residual	4,878	5,250	5,625	5,750	5,775	5,800	5,850	5,900
Food, seed, & industrial	1,454	1,495	1,800	1,875	1,925	1,975	2,025	2,075
Domestic	6,332	6,745	7,425	7,625	7,700	7,775	7,875	7,975
Exports	1,584	1,725	1,650	1,700	1,775	1,850	1,925	2,000
Total use	7,916	8,470	9,075	9,325	9,475	9,625	9,800	9,975
Ending stocks	1,100	2,113	1,803	1,728	1,808	1,848	1,823	1,803
<b>Prices (dollars per bushel):</b>								
Target price	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
Loan rate	1.62	1.72	1.58	1.57	1.57	1.62	1.62	1.63
Farm price	2.37	2.05	2.20	2.25	2.25	2.25	2.25	2.30
Deficiency payment rate	0.41	0.73	0.55	0.50	0.50	0.50	0.50	0.45
Deficiency payments (million dollars)	2,080	3,622	3,056	2,771	2,806	2,858	2,913	2,635
<b>Variable costs of production (dollars)</b>								
Per acre	135.17	135.25	142.60	146.92	151.96	156.90	161.74	166.56
Per bushel	1.24	1.03	1.14	1.16	1.18	1.21	1.23	1.25
<b>Returns over variable costs (dollars per acre)</b>								
Participant	144.78	187.97	182.59	183.46	181.79	180.22	178.76	179.50
Nonparticipant	122.21	134.12	133.50	138.83	137.17	135.60	134.14	139.34
Normal flex acres	122.21	134.12	133.50	138.83	137.17	135.60	134.14	139.34
Optional flex acres	165.10	211.06	191.25	191.33	189.67	188.10	186.64	186.59

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.



**Table 7. Sorghum baseline projections**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
Program variables:								
ARP (percent)	7.5	5.0	0	0	0	0	0	0
Participation (percent)	77.1	78.6	78	79	78	78	75	75
Acreage (million acres):								
Idled ARP acres	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0
0/92 acres	1.7	1.5	1.5	1.5	1.9	2.2	2.5	2.6
CRP acres	2.4	2.4	2.5	2.3	1.3	0.7	0.3	0.1
Flexed acres (net)	-0.4	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Total planted acres	11.1	13.3	11.6	11.7	12.2	12.4	12.4	12.5
Total harvested acres	9.9	12.2	10.4	10.5	10.9	11.1	11.1	11.2
Yields (bushels per acre):								
Yield/harvested acre	59.3	72.8	67.0	67.5	68.0	68.5	69.0	69.5
Program yield	58.0	59.1	59.0	59.0	59.0	59.0	59.0	59.0
Supply and use (million bushels):								
Beginning stocks	143	53	104	96	93	105	117	119
Imports	0	0	0	0	0	0	0	0
Production	585	884	695	710	740	760	765	780
Supply	727	937	799	806	833	865	882	899
Feed & residual	374	475	395	390	395	400	410	420
Food, seed, & industrial	9	8	8	8	8	8	8	8
Domestic	383	483	403	398	403	408	418	428
Exports	292	275	300	315	325	340	345	345
Total use	674	758	703	713	728	748	763	773
Ending stocks	53	180	96	93	105	117	119	126
Prices (dollars per bushel):								
Target price	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61
Loan rate	1.54	1.63	1.50	1.49	1.49	1.54	1.55	1.55
Farm price	2.25	1.85	2.05	2.10	2.10	2.10	2.10	2.15
Deficiency payment rate	0.37	0.76	0.56	0.51	0.51	0.51	0.51	0.46
Deficiency payments (million dollars)	175	345	264	247	262	270	272	249
Variable costs of production (dollars)								
Per acre	74.67	74.99	79.34	81.63	84.20	86.73	89.21	91.70
Per bushel	1.26	1.03	1.18	1.21	1.24	1.27	1.29	1.32
Returns over variable costs (dollars per acre)								
Participant	69.58	91.70	86.09	85.70	84.17	82.70	81.26	80.80
Nonparticipant	58.75	59.69	58.01	60.12	58.60	57.12	55.69	57.73
Normal flex acres	58.75	59.69	58.01	60.12	58.60	57.12	55.69	57.73
Optional flex acres	80.21	104.61	91.05	90.21	88.69	87.21	85.78	84.87

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 8. Barley baseline projections**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
<b>Program variables:</b>								
ARP (percent)	7.5	5.0	0	0	0	0	0	0
Participation (percent)	75.9	75.1	78	79	79	80	80	75
<b>Acreage (million acres):</b>								
Idled ARP acres	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0
0/92 acres	1.5	1.9	2.0	2.0	2.4	2.7	3.0	3.2
CRP acres	2.8	2.8	3.0	3.0	2.1	1.3	0.7	0.4
Flexed acres (net)	-0.3	-0.6	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6
Total planted acres	8.9	7.6	7.7	7.7	8.1	8.4	8.7	8.8
Total harvested acres	8.4	7.3	7.1	7.1	7.5	7.8	8.0	8.1
<b>Yields (bushels per acre):</b>								
Yield/harvested acre	55.2	62.4	58.0	58.5	59.0	59.5	60.0	60.5
Program yield	46.2	46.4	47.1	47.1	47.1	47.1	47.1	47.1
<b>Supply and use (million bushels):</b>								
Beginning stocks	135	129	152	152	151	165	179	174
Imports	25	12	30	30	35	35	35	35
Production	464	456	410	415	445	465	480	490
Supply	624	597	592	597	631	665	694	699
Feed & residual	230	195	190	190	205	220	235	250
Food, seed, & industrial	171	165	165	166	166	166	175	175
Domestic	401	360	355	356	371	386	410	425
Exports	94	80	85	90	95	100	110	110
Total use	495	440	440	446	466	486	520	535
Ending stocks	129	157	152	151	165	179	174	164
<b>Prices (dollars per bushel):</b>								
Target price	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36
Loan rate	1.32	1.40	1.29	1.28	1.28	1.32	1.33	1.33
Farm price	2.10	2.03	2.10	2.10	2.05	2.05	2.05	2.08
Deficiency payment rate	0.62	0.56	0.49	0.49	0.52	0.49	0.50	0.45
Deficiency payments (million dollars)	173	153	141	142	161	165	180	155
<b>Variable costs of production (dollars)</b>								
Per acre	59.54	59.78	63.13	64.97	67.06	69.12	71.15	73.16
Per bushel	1.08	0.96	1.09	1.11	1.14	1.16	1.19	1.21
<b>Returns over variable costs (dollars per acre)</b>								
Participant	73.01	83.44	78.28	77.50	74.71	72.47	71.87	70.69
Nonparticipant	56.38	66.89	58.67	57.88	53.89	52.85	51.85	52.68
Normal flex acres	56.38	66.89	58.67	57.88	53.89	52.85	51.85	52.68
Optional flex acres	85.02	92.87	81.74	80.96	78.38	75.93	75.40	73.87

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 9. Oats baseline projections**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
Program variables:								
ARP (percent)	0	0	0	0	0	0	0	0
Participation (percent)	37.9	40.4	42	42	42	44	45	45
Acreage (million acres):								
Idled ARP acres	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
O/92 acres	0.6	0.7	0.7	0.7	0.9	1.0	1.1	1.2
CRP acres	1.3	1.4	1.5	1.4	1.0	0.6	0.4	0.2
Flexed acres (net)	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Total planted acres	8.7	8.0	5.5	5.3	5.5	5.7	5.7	5.8
Total harvested acres	4.8	4.5	4.2	4.0	4.2	4.4	4.6	4.6
Yields (bushels per acre):								
Yield/harvested acre	50.7	65.6	56.1	56.4	56.7	57.0	57.3	57.6
Program yield	48.7	48.6	48.5	48.5	48.5	48.5	48.5	48.5
Supply and use (million bushels):								
Beginning stocks	171	128	101	96	91	95	108	118
Imports	75	50	65	65	65	65	65	65
Production	243	295	235	225	240	250	260	265
Supply	489	472	401	386	396	410	433	448
Feed & residual	235	230	175	165	170	185	195	205
Food, seed, & industrial	125	125	125	125	126	112	115	116
Domestic	360	355	300	290	296	297	310	321
Exports	2	6	5	5	5	5	5	5
Total use	362	361	305	295	301	302	315	326
Ending stocks	128	111	96	91	95	108	118	122
Prices (dollars per bushel):								
Target price	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Loan rate	0.83	0.88	0.81	0.81	0.81	0.83	0.84	0.84
Farm price	1.20	1.33	1.35	1.40	1.35	1.30	1.30	1.30
Deficiency payment rate	0.35	0.17	0.10	0.05	0.10	0.15	0.15	0.15
Deficiency payments (million dollars)	30	15	10	5	10	17	12	12
Variable costs of production (dollars)								
Per acre	47.43	47.38	49.97	51.50	53.30	55.07	56.81	58.53
Per bushel	0.94	0.72	0.89	0.91	0.94	0.97	0.99	1.02
Returns over variable costs (dollars per acre)								
Participant	27.90	46.89	29.89	29.52	27.37	25.21	23.86	22.53
Nonparticipant	13.41	39.87	25.77	27.46	23.25	19.03	17.68	16.35
Normal flex acres	13.41	39.87	25.77	27.46	23.25	19.03	17.68	16.35
Optional flex acres	30.46	48.13	30.62	29.88	28.10	26.30	24.95	23.63

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 10. Wheat baseline projections**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
<b>Program variables:</b>								
ARP (percent)	15	5	0	0	0	0	0	0
Participation (percent)	85.4	83.2	87	86	86	85	85	85
<b>Acreage (million acres):</b>								
Idled ARP acres	10.1	3.3	0.0	0.0	0.0	0.0	0.0	0.0
0/92 acres	5.8	4.0	5.0	5.3	6.8	8.0	8.4	8.9
CRP acres	10.4	10.6	11.2	10.6	7.0	4.1	2.4	0.9
Flexed acres (net)	-1.3	-1.5	-2.0	-2.0	-2.2	-2.2	-2.3	-2.5
Total planted acres	69.9	72.3	72.0	72.5	74.1	75.3	76.3	76.9
Total harvested acres	57.7	62.4	62.6	63.1	64.5	65.5	66.4	66.9
<b>Yields (bushels per acre):</b>								
Yield/harvested acre	34.3	39.4	38.4	38.6	38.8	39.0	39.2	39.4
Program yield	34.4	34.4	34.5	34.5	34.5	34.5	34.5	34.5
<b>Supply and use (million bushels):</b>								
Beginning stocks	866	472	675	644	624	614	619	612
Production	1,981	2,459	2,404	2,436	2,503	2,555	2,605	2,635
Imports	41	72	85	90	95	100	105	110
Supply	2,888	3,003	3,164	3,170	3,222	3,269	3,329	3,357
Food	789	830	875	890	905	920	935	945
Seed & industrial	94	93	95	96	98	100	102	104
Feed and residual	254	225	300	285	280	280	280	280
Domestic	1,136	1,148	1,270	1,271	1,283	1,300	1,317	1,329
Exports	1,280	1,355	1,250	1,275	1,325	1,350	1,400	1,425
Total use	2,416	2,503	2,520	2,546	2,608	2,650	2,717	2,754
Ending stocks	472	500	644	624	614	619	612	603
<b>Prices (dollars per bushel):</b>								
Target price	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Loan rate	2.04	2.21	2.21	2.10	2.06	2.06	2.11	2.13
Farm price	3.00	3.25	2.85	2.90	2.95	2.95	3.00	3.05
Deficiency payment rate	1.35	0.81	1.15	1.10	1.05	1.05	1.00	0.95
Deficiency payments (million dollars)	2,247	1,370	2,144	2,037	2,026	2,065	2,003	1,933
<b>Variable costs of production (dollars)</b>								
Per acre	52.33	52.42	55.33	56.98	58.87	60.73	62.56	64.38
Per bushel	1.53	1.33	1.44	1.48	1.52	1.56	1.60	1.63
<b>Returns over variable costs (dollars per acre)</b>								
Participant	73.53	93.49	87.83	87.22	86.38	85.11	84.37	83.65
Nonparticipant	50.57	75.63	54.11	54.96	55.59	54.32	55.04	55.79
Normal flex acres	50.57	75.63	54.11	54.96	55.59	54.32	55.04	55.79
Optional flex acres	97.01	103.50	93.78	92.91	91.81	90.54	89.54	88.57

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 11. Rice baseline projections, rough basis**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
<b>Program variables:</b>								
ARP (percent)	5	0	0	0	0	0	0	0
Participation (percent)	95.0	96.4	96.0	96.0	96.0	96.0	96.0	96.0
<b>Acreage (thousand acres):</b>								
Idled ARP acres	198	0	0	0	0	0	0	0
50/92 acres	498	439	486	499	512	526	526	527
Flexed acres (net)	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Planted	2,878	3,174	3,128	3,113	3,098	3,083	3,087	3,090
Harvested	2,775	3,130	3,066	3,051	3,036	3,021	3,026	3,028
<b>Yields (lbs. per acre):</b>								
Yield/harvested acre	5,674	5,722	5,650	5,656	5,663	5,669	5,694	5,718
Program yield	4,849	4,843	4,855	4,855	4,855	4,855	4,855	4,855
<b>Supply (million cwt.):</b>								
Beginning stocks	24.6	27.3	32.7	29.7	29.0	28.4	29.1	30.7
Production	157.5	179.1	173.2	172.6	171.9	171.3	172.3	173.2
Imports	5.3	6.0	7.9	8.7	9.5	10.5	11.4	12.3
Total supply	187.4	212.4	213.8	211.0	210.4	210.2	212.8	216.2
<b>Utilization (million cwt.):</b>								
Domestic	84.7	88.5	97.1	100.0	103.0	106.1	109.1	112.3
Exports	66.4	76.0	78.0	73.0	70.0	66.0	64.0	63.0
Residual	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total use	160.1	173.5	184.1	182.0	182.0	181.1	182.1	184.3
Ending stocks (million cwt.)	27.3	38.9	29.7	29.0	28.4	29.1	30.7	31.9
<b>Prices (dollars per cwt.):</b>								
Target price	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71
Loan rate	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Average market price	7.58	5.90	5.84	6.07	6.31	6.44	6.51	6.64
Deficiency payment rate	3.07	4.21	4.21	4.21	4.21	4.21	4.21	4.13
World price	5.90	5.37	4.50	4.65	4.80	4.95	5.10	5.25
Deficiency payments (million dollars)	458	615	653	666	678	677	678	667
<b>Variable costs of production (dollars)</b>								
Per acre	330.31	332.83	351.85	361.87	373.11	384.34	395.63	407.04
Per cwt.	5.82	5.82	6.23	6.40	6.59	6.78	6.95	7.12
<b>Returns over variable costs (dollars per acre)</b>								
Participant	248.67	281.07	261.99	259.92	254.38	242.49	228.42	214.51
Nonparticipant	99.78	4.77	-21.92	-18.46	-15.62	-19.12	-25.02	-27.59
Normal flex acres	136.66	107.77	88.25	86.18	80.64	68.76	54.69	43.89
Optional flex acres	285.52	311.66	292.65	290.58	285.04	273.15	259.08	244.62

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 12. Upland cotton baseline projections**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
<b>Program variables:</b>								
ARP (percent)	5	10	15	12.5	12.5	12.5	15	15
Participation (percent)	83.5	88.9	86	87	87	86	86	86
<b>Acreage (million acres):</b>								
Idled ARP acres	0.6	1.3	2	1.7	1.7	1.6	2	2
50/92 acres	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3
CRP acres	1.3	1.4	1.5	1.5	0.9	0.6	0.3	0.2
Flexed acres (net)	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Total planted acres	13.8	13	12.5	12.8	12.8	12.8	12.8	12.8
Total harvested acres	12.7	10.9	11.5	11.8	11.8	11.8	11.8	11.8
<b>Yields (lbs/acre):</b>								
Yield/harvested acre	650	693	695	705	715	725	735	745
Program yield	590	590	600	600	600	600	600	600
<b>Supply and use (thousand bales)</b>								
Beginning stocks	2,262	3,583	5,000	4,900	5,100	5,300	5,400	5,500
Imports	13	2	2	2	2	2	2	2
Production	17,216	15,710	16,700	17,300	17,600	17,800	18,100	18,300
Supply	19,491	19,295	21,702	22,202	22,702	23,102	23,502	23,802
Domestic use	9,548	9,835	10,600	10,800	11,000	11,200	11,400	11,600
Exports	6,348	5,025	6,300	6,400	6,500	6,600	6,700	6,800
Total use	15,896	14,860	16,900	17,200	17,500	17,800	18,100	18,400
Ending stocks	3,583	4,471	4,900	5,100	5,300	5,400	5,500	5,500
<b>Prices (dollars per pound):2/</b>								
Target price	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729
Loan rate	0.5077	0.5235	0.5005	0.5000	0.5000	0.5000	0.5020	0.5160
Deficiency payments (million dollars)	552	1,019	860	791	724	680	626	593
<b>Variable costs of production (dollars)</b>								
Per acre	282.5	288.97	303.81	312.71	322.81	333.13	343.32	353.66
Per pound	0.43	0.42	0.44	0.44	0.45	0.46	0.47	0.47
<b>Returns over variable cost (dollars per acre)</b>								
Participant	164.35	210.87	183.77	188.48	184.75	182.81	176.61	174.37
Nonparticipant	124.31	137.70	134.10	143.31	145.65	148.56	153.55	154.31
Normal flex acres	124.31	137.70	134.10	143.31	145.65	148.56	153.55	154.31
Optional flex acres	183.90	257.47	240.30	235.71	230.25	227.16	226.75	223.61

1/ Historical data as of June 1993.

2/ USDA is prohibited from publishing cotton price projections.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 13. Soybean and products baseline projections**

	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	1991/92	1992/93						
<b>SOYBEANS</b>								
<b>Acreage (million acres)</b>								
Planted	59.2	59.3	62.0	62.3	62.5	62.5	63.0	63.0
Harvested	58.0	58.4	60.9	61.2	61.4	61.4	61.9	61.9
Yield/harvested acre (bushels)	34.2	37.6	35.9	36.2	36.6	36.9	37.3	37.6
<b>Supply (million bushels)</b>								
Beginning stocks, Sept 1	329	278	260	280	300	315	305	305
Production	1,987	2,197	2,185	2,215	2,245	2,265	2,305	2,325
Imports	3	2	3	3	4	5	5	5
Total supply	2,319	2,477	2,448	2,498	2,549	2,585	2,615	2,635
<b>Disposition (million bushels)</b>								
Crush	1,254	1,280	1,320	1,335	1,350	1,370	1,380	1,390
Seed, feed, & residual	102	112	98	98	99	100	100	100
Exports	685	775	750	765	785	810	830	850
Total disposition	2,041	2,167	2,168	2,198	2,234	2,280	2,310	2,340
<b>Carryover stocks, Aug. 31</b>								
Total ending stocks	278	310	280	300	315	305	305	295
<b>Prices (dollars per bushel):</b>								
Loan rate	5.02	5.02	5.02	5.02	5.02	5.02	5.02	5.02
Effective marketing loan	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92
Soybean price, farm	5.58	5.50	5.90	5.85	5.80	5.85	5.85	5.95
<b>Variable costs of production</b>								
Per acre	72.76	73.44	77.80	79.94	82.39	84.77	87.10	89.47
Per bushel	2.13	1.95	2.17	2.21	2.25	2.30	2.34	2.38
<b>Returns over variable costs</b>								
Net returns (dollars per acre)	118.08	133.36	134.01	131.83	129.89	131.10	131.11	134.25
<b>SOYBEAN OIL (million lbs.)</b>								
Beginning stocks, Oct. 1	1,786	2,239	2,165	2,295	2,310	2,260	2,200	2,120
Production	14,345	13,834	15,075	15,260	15,445	15,685	15,815	15,945
Imports	1	2	5	5	5	5	5	5
Total supply	16,132	16,075	17,245	17,560	17,760	17,950	18,020	18,070
Domestic disappearance	12,245	12,675	13,350	13,600	13,850	14,100	14,300	14,450
Exports	1,648	1,600	1,600	1,650	1,650	1,650	1,600	1,575
Total demand	13,893	14,275	14,950	15,250	15,500	15,750	15,900	16,025
Ending stocks, Sept. 30	2,239	1,800	2,295	2,310	2,260	2,200	2,120	2,045
Soybean oil price (\$/lb)	0.191	0.208	0.205	0.202	0.205	0.210	0.213	0.215
<b>SOYBEAN MEAL (thousand short tons)</b>								
Beginning stocks, Oct. 1	285	230	275	275	275	275	275	275
Production	29,831	30,460	31,375	31,775	32,125	32,525	32,825	33,025
Imports	67	110	75	75	75	75	75	75
Total supply	30,183	30,800	31,725	32,125	32,475	32,875	33,175	33,375
Domestic disappearance	23,103	23,900	25,300	25,650	25,900	26,150	26,350	26,450
Exports	6,850	6,625	6,150	6,200	6,300	6,450	6,550	6,650
Total demand	29,953	30,525	31,450	31,850	32,200	32,600	32,900	33,100
Ending stocks, Sept. 30	230	275	275	275	275	275	275	275
Soybean meal price (dollars per ton)	189.2	187.5	190.0	190.0	187.5	185.0	185.0	187.5

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 14. Fruit baseline projections 1/**

Unit	Selected history 2/		1995	1996	1997	1998	1999	2000	
	1991	1992							
Utilized production:									
All fruits	Million short tons	26.8	31.3	32.9	33.8	34.6	35.2	35.8	36.3
Apples	Million pounds	9,834	10,296	10,574	10,685	10,786	10,878	10,963	11,044
Oranges	Thousand short tons	8,907	11,165	12,149	12,814	13,402	13,894	14,283	14,609
Imports: 3/									
All fruit	Million short tons	8.5	7.7	7.8	7.8	7.8	7.8	7.8	7.9
Apples	Million pounds	2,858	2,462	2,514	2,500	2,493	2,495	2,506	2,522
Oranges	Thousand short tons	2,344	1,683	1,537	1,427	1,342	1,280	1,239	1,208
Exports: 3/									
All fruit	Million short tons	3.8	4.1	4.3	4.5	4.6	4.7	4.8	4.9
Apples	Million pounds	1,459	1,477	1,569	1,625	1,676	1,719	1,755	1,787
Oranges	Thousand short tons	1,245	1,483	1,562	1,612	1,656	1,693	1,722	1,747
Grower prices:									
All fruits	1977=100	262	183	161	161	162	164	167	171
Apples	Cents per pound	18.1	15.0	16.1	16.2	16.5	16.8	17.2	17.7
Oranges	Dollars per ton	180	150	155	153	152	152	154	156

1/ Excludes tree nuts. Price indexes are for calendar years; other estimates are for crop years.

2/ Historical data as of June 1993.

3/ Includes farm weight equivalent of fresh and processed products.

**Table 15. Vegetables baseline projections 1/**

Unit	Selected history 2/		1995	1996	1997	1998	1999	2000	
	1991	1992							
Production:									
All vegetables	Million cwt	686	700	728	737	746	755	764	773
Potatoes	Million cwt	418	412	417	425	429	435	440	445
Sweet potatoes	Million cwt	11.2	12.0	12.2	12.3	12.4	12.4	12.5	12.6
Dry beans	Million cwt	33.8	22.0	25.5	26.0	26.5	27.0	27.5	28.0
Imports: 3/									
All vegetables	Million cwt	73.12	90.57	98.07	99.29	100.48	101.67	102.87	104.04
Potatoes	Million cwt	17.27	15.74	17.70	18.00	18.35	18.67	19.01	19.35
Sweet potatoes	Million cwt	0.51	0.62	0.58	0.59	0.60	0.61	0.61	0.62
Dry beans	Million cwt	0.73	0.68	0.72	0.73	0.74	0.75	0.76	0.77
Exports: 3/									
All vegetables	Million cwt	46.76	52.32	43.75	44.30	44.84	45.38	45.93	46.46
Potatoes	Million cwt	19.76	24.87	23.66	24.73	25.21	26.02	26.71	27.58
Sweet potatoes	Million cwt	0.16	0.19	0.18	0.19	0.20	0.20	0.21	0.22
Dry beans	Million cwt	9.96	6.50	8.32	8.70	9.08	9.46	9.85	10.24
Grower prices:									
All vegetables	1977=100	135	151	158	160	162	165	168	170
Potatoes	Dollars per cwt	4.96	5.28	5.50	5.48	5.68	5.78	5.93	6.06
Sweet potatoes	Dollars per cwt	13.30	13.30	13.81	13.98	14.15	14.33	14.51	14.69
Dry beans	Dollars per cwt	15.60	20.70	24.22	24.58	24.95	25.33	25.71	26.09

1/ Price indexes are for calendar years; other estimates are for crop years.

2/ Historical data as of June 1993.

3/ Includes farm weight equivalent of processed products.



**Table 16. U.S. sugar baseline projections, fiscal years 1/**

	Unit	Selected history 2/		1995	1996	1997	1998	1999	2000	
		1991	1992							
Beets-Planted	1000 acres	1,400	1,427	1,468	1,480	1,485	1,492	1,499	1,506	
Harvested	1000 acres	1,377	1,387	1,443	1,455	1,460	1,467	1,474	1,481	
Yield	Tons per acre	20.0	20.3	20.8	20.9	21.0	21.1	21.2	21.3	
Production	Mil. short tons	27.5	28.2	30.0	30.4	30.7	31.0	31.3	31.6	
Cane-Harvested	1000 acres	726	850	890	900	910	920	920	920	
Yield	Tons per acre	36.4	34.1	34.2	34.2	34.2	34.2	34.2	34.2	
Production	Mil. short tons	26.5	29.0	30.4	30.8	31.1	31.5	31.5	31.5	
Supply:										
Beg'n Stocks 3/	1000 S. Tons	1,210	1,496	1,205	1,430	1,460	1,469	1,486	1,501	
Production	1000 S. Tons	6,904	7,229	8,070	8,190	8,290	8,400	8,470	8,530	
Beet Sugar 4/	1000 S. Tons	3,854	3,836	4,490	4,560	4,610	4,670	4,730	4,780	
Cane Sugar 5/	1000 S. Tons	3,050	3,393	3,580	3,630	3,680	3,730	3,740	3,750	
Total imports	1000 S. Tons	2,825	2,192	2,015	1,850	1,850	1,867	1,895	1,923	
For consump. 6/	1000 S. Tons	2,330	1,525	1,415	1,250	1,250	1,267	1,295	1,323	
Other imports 7/	1000 S. Tons	495	667	600	600	600	600	600	600	
Total supply	1000 S. Tons	10,939	10,917	11,290	11,470	11,600	11,736	11,851	11,954	
Use:										
Domestic disapp.	1000 S. Tons	8,773	8,866	9,360	9,500	9,630	9,750	9,850	9,940	
Exports	1000 S. Tons	682	630	500	500	500	500	500	500	
Surplus exports 8/	1000 S. Tons			0	10	1	0	0	0	
Misc. 9/	1000 S. Tons	-12	-29	0	0	0	0	0	0	
Total use	1000 S. Tons	9,443	9,467	9,860	10,000	10,130	10,250	10,350	10,440	
Ending stocks										
Available stocks 10/	1000 S. Tons	1,496	1,450	1,430	1,450	1,469	1,486	1,501	1,514	
Surplus stocks, carry-over 11/	1000 S. Tons			0	10	1	0	0	0	
Excess domestic supply 12/	1000 S. Tons		0	0	20	1	0	0	0	
Stocks/use ratio 13/	Percent	15.84	15.32	14.50	14.50	14.50	14.50	14.50	14.50	
Raw sugar prices:										
World (No. 11)	Cents per lb.	9.26	9.22	10.30	10.30	10.60	10.90	11.20	11.40	
N. Y. (No. 14)	Cents per lb.	21.89	21.39	21.80	21.80	21.80	21.80	21.80	21.80	
Raw sugar loan rate	Cents per lb.	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	
Beet sugar loan	Cents per lb.	21.93	22.85	23.42	23.42	23.42	23.42	23.42	23.42	
Grower prices:										
Sugarbeets 14/	Dollars per ton	43.00	38.50	42.70	42.65	42.70	42.70	42.70	42.70	
Sugarcane	Dollars per ton	30.80	29.00	30.50	30.50	30.50	30.50	30.50	30.50	

1/ Fiscal year is October 1 through September 30. The 1994 crop corresponds with fiscal 1995, for example. Data for area planted, harvested, yield, and production of sugarbeets and sugarcane are on the NASS crop year basis; all other data are on a fiscal year basis. 2/ Historical data as of June 1993. 3/ Not equal to previous year ending stocks when allotments are in effect. 4/ Raw sugar yield per ton of beets (not including sugar from molasses) rises at about 0.4 percent each year. Desugaring of molasses adds a net 350,000 tons from 1995 on. 5/ Raw sugar yield per ton of cane rises 0.25 percent per year as new processing technology is adopted. 6/ Quota imports and sugar from Canada. Projected imports do not necessarily reflect the determination by the Secretary which will be made pursuant to Additional U.S. Note 3 of Chap. 17 of the HTSUS. 7/ For re-export and for polyhydric alcohol. 8/ Assumed to be half of current year's excess domestic supply; receives world price. 9/ Includes CCC disposals, refining loss and miscellaneous non-food use, and a statistical adjustment to account for invisible stock change. 10/ Excludes surplus stocks which cannot be domestically marketed in that fiscal year. 11/ That part of production in excess of the maximum allotment which will be marketed in the next year. 12/ Domestic production in excess of allotments. 13/ Does not include surplus stocks. 14/ When allotments are in effect, sugarbeet prices include lower returns on beet sugar surplus disposed of on the world market.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 17. Flue-cured tobacco baseline projections**

	Unit	Selected history 1/		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	
		1991/92	1992/93							
Acreage, yield, and production:										
Planted area	1,000 acres	403	402	360	352	341	332	324	316	
Harvested area	1,000 acres	403	402	360	352	341	332	324	316	
Yield	lbs./ac.	2,265	2,257	2,250	2,250	2,250	2,250	2,250	2,250	
Production	Mil. lbs.	912	906	810	793	768	747	729	711	
Supply:										
Beg. stocks	Mil. lbs.	1,216	1,223	1,109	1,064	1,027	990	937	896	
Marketings	Mil. lbs.	882	901	810	793	768	747	729	711	
Total 2/	Mil. lbs.	2,098	2,124	1,919	1,857	1,795	1,737	1,666	1,607	
Use:										
Domestic	Mil. lbs.	471	525	460	440	420	420	400	380	
Export	Mil. lbs.	404	425	395	390	385	380	370	370	
Total 2/	Mil. lbs.	875	950	855	830	805	800	770	750	
Ending stocks:										
Total	Mil. lbs.	1,223	1,174	1,064	1,027	990	937	896	857	
Price:										
Avg. to growers	\$/Cwt	172.3	172.6	183	186	189	192	195	198	
Support	\$/Cwt	152.8	156.0	164	167	170	173	176	179	

1/ Historical data as of June 1993.

2/ Domestic tobacco only.

**Table 18. Burley tobacco baseline projections**

	Unit	Selected history		1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	
		1991/92	1992/93							
Acreage, yield, and production:										
Planted area	1,000 acres	312	332	248	250	262	265	265	265	
Harvested area	1,000 acres	312	332	248	250	262	265	265	265	
Yield	lbs./ac.	2,110	2,163	2,100	2,100	2,100	2,100	2,100	2,100	
Production	Mil. lbs.	658	719	520	525	550	557	557	557	
Supply:										
Beg. stocks	Mil. lbs.	765	778	793	718	658	628	610	597	
Marketings	Mil. lbs.	657	700	520	525	550	557	557	557	
Total 2/	Mil. lbs.	1,422	1,478	1,313	1,243	1,208	1,185	1,167	1,154	
Use:										
Domestic	Mil. lbs.	436	410	370	360	350	340	330	320	
Export	Mil. lbs.	208	215	225	225	230	235	240	245	
Total 2/	Mil. lbs.	644	625	595	585	580	575	570	565	
Ending stocks:										
Total	Mil. lbs.	778	853	718	658	628	610	597	589	
Price:										
Avg. to growers	\$/Cwt	179.0	181.0	187	191	195	198	201	203	
Support	\$/Cwt	158.0	165.0	177	181	185	188	190	193	

1/ Historical data as of June 1993.

2/ Domestic tobacco only.

## **Livestock, Dairy, and Poultry**

Moderate feed prices and inflation, demand strength reflected in steady growth in real disposable income, and ample forage supplies provide impetus for increasing red meat and poultry supplies through the end of the 1990s. In the baseline scenario, expansion will exceed population growth with per capita meat consumption reaching 225 pounds (retail weight) by 2000.

Consumers will purchase more meat, but a larger proportion will be poultry. Poultry's continued lower prices and production costs will be primary factors in determining its market share. The meats will vie for market share through product development, advertising, and promotion of meat's place in a healthful diet. Decreases in the real price of meats combined with increases in real disposable income will allow consumers to buy more meat with a smaller proportion of disposable income.

Total egg production will expand slightly over the decade but per capita egg consumption will continue to decline. Real egg prices will continue to fall.

Dairy productivity gains will continue through the 1990s. Milk production will grow despite slowly declining dairy cow numbers throughout the period. Real milk prices will fall.

### **Beef**

Positive returns to the cow-calf sector, along with ample forage supplies, will encourage slow herd expansion and increased beef production. Profit incentives above cash costs per cow are likely to remain positive, but returns may not be sufficient to encourage large expansion. Cattle herds will likely build to and then stabilize near 105 million head for 1995 to 2000, well below the 115.4 million head peak level of the early 1980s.

Shifts toward a breeding herd of larger, mature-size cattle, and heavier slaughter weights partially offset the need for expanding cattle inventories to previous levels. Plentiful forage will permit a continuation of heavier weaning and feedlot placement weights and provide a safety margin for poor grazing conditions.

The beef production mix will continue to shift toward a larger proportion of fed beef. Cattle will continue to be placed on feed at heavier, forage-enhanced weights and fed for 120 to 140 days to Select or Choice grade. Heavier placement weights coupled with less finish required to reach Choice grade will hold down feed grain use and feed fed per pound of fed beef produced. Fed cattle marketings are projected to be relatively flat during the late 1990s. Nonfed steer and heifer slaughter and calf slaughter will remain at relatively low levels as a larger proportion of the herd is placed on feed.

Adjustments in world beef trade will continue as market access is opened. The U.S. is expected to remain the primary source of high quality fed beef for export, and will see exports of high quality steaks and roasts continue to increase, primarily to Pacific rim nations. Australia and perhaps New Zealand will also increase exports to Pacific rim nations, although their beef will be lower quality, grassfed beef with limited amounts of fed beef.

## **Pork**

Pork production is projected to fall cyclically during 1995 to 1997, but then grows slowly through the end of the decade. Relatively low and stable feed costs remove large cyclical movements from hog inventories and production.

Per capita pork consumption (retail basis) is projected to hold near 50 pounds annually in these projections after falling from 53 pounds in 1995. Nominal hog prices are expected to rise from 1995 to 2000, with gains exceeding inflation in years of production declines.

Pork imports are expected to be near 700 million pounds annually on a carcass weight basis. Yearly variations will depend upon major foreign suppliers such as Canada and Denmark, as well as exchange rate fluctuations. Exports are expected to rise over the period.

## **Poultry and Eggs**

Poultry production is expected to continue to expand during 1995 to 2000 as broiler and turkey meats gain an increasing share of total meat consumption. Poultry meat will be less expensive than other meats so consumers can purchase more poultry meat per dollar. Poultry firms will continue aggressive market development and promote poultry's image of providing lean, convenient products. Production gains for turkeys reflect continued strong growth projected in the further-processed products market.

The broiler and turkey industries have kept the cost of production from increasing at the full rate of inflation through technological advancements and improved production management practices, including taking advantage of economies of size through increasing vertical integration. While some amount of technological improvement and continued vertical integration is expected to occur through the late-1990s, it is not anticipated to affect production costs as significantly as in the past 10 years.

Continued sharp competition in the world poultry meat market is projected to constrain growth in U.S. poultry exports to moderate increases. Sizeable increases are expected in exports of broiler parts as U.S. real prices decline, especially for dark meat.

Table egg producers are expected to reduce production in response to low industry net returns. A small expansion in total U.S. egg production during 1995 to 2000 reflects increased broiler hatching egg production to accommodate broiler sector expansion.

Per capita egg consumption is expected to continue a long-term declining trend in the second half of the 1990s, falling 2 to 3 eggs a year. Changing demographics will contribute to this decline as people now under age 35 and who consume fewer eggs become older and a larger part of the population.

## **Dairy**

Milk production is projected to grow during 1995 to 2000. Productivity gains and structural changes that lowered costs and caused the supply shifts of the 1980s are expected to continue through the end of the 1990s. Milk cow numbers are expected to decline slowly, continuing a long-term trend. However, increases in milk per cow will be offsetting. Efficiency gains in milk production are accentuated by the assumed adoption of bST.

Declining real milk prices will place considerable pressure on farms unable to lower costs enough to remain competitive. Exit probably will outweigh expansion of lower-cost producers and continued development of western dairy areas.

Real milk prices are projected to fall slowly during the second half of the 1990s. Real price declines, income growth, and population increases will boost commercial use. However, the growth rate is projected slightly below the 1980 to 1988 trend.

The dairy price support is increased by \$0.25 per hundredweight in years when the level of removals would be projected to be below 3.5 billion pounds milk equivalent, total solids basis, without the increase in support. Support remains at \$10.10 per hundredweight in 1995/96 and 1996/97, but then increases to \$10.60 by 2000. With the support price increases, net removals stabilize at 4.7 billion pounds, milk equivalent, toward the end of the 1990s.

**Table 19. Per capita meat consumption, retail and boneless weight, baseline projections**

	Selected history 1/		1995	1996	1997	1998	1999	2000
	1991	1992						
Pounds, retail weight								
Total beef	66.8	66.5	68.7	68.9	69.2	68.4	66.7	65.6
Total veal	1.0	1.0	0.8	0.8	0.7	0.7	0.6	0.6
Total pork	50.4	53.1	53.0	50.4	49.3	49.5	50.0	50.6
Lamb and mutton	1.5	1.4	1.3	1.2	1.3	1.3	1.3	1.4
Total red meat	119.6	122.0	123.9	121.4	120.5	119.9	118.7	118.1
Broilers	63.9	66.8	72.3	73.7	75.1	76.5	78.0	79.5
Other chicken	1.7	1.6	2.3	1.9	1.8	1.8	1.8	1.8
Turkeys	18.0	18.0	19.1	21.2	22.4	23.8	25.0	25.9
Total poultry	83.6	86.4	93.8	96.8	99.3	102.1	104.8	107.3
Red meat and poultry	203.2	208.4	217.7	218.2	219.8	222.0	223.4	225.4
Pounds, boneless weight								
Total beef	63.9	63.7	65.8	66.5	66.7	65.9	64.7	63.7
Total veal	0.8	0.9	0.7	0.7	0.6	0.6	0.5	0.5
Total pork	43.5	45.8	45.8	43.6	42.5	42.7	43.2	43.7
Lamb and mutton	1.2	1.1	1.0	1.0	1.0	1.0	1.0	1.1
Total red meat	109.4	111.4	113.3	111.6	110.9	110.2	109.5	108.9
Broilers	50.0	52.4	56.8	57.8	58.9	60.0	61.2	62.4
Other chicken	1.2	1.1	1.6	1.3	1.2	1.2	1.2	1.2
Turkeys	14.2	14.2	15.1	16.8	17.7	18.8	19.7	20.5
Total poultry	65.4	67.8	73.5	75.9	77.9	80.1	82.2	84.2
Red meat and poultry	174.8	179.2	186.8	187.5	188.8	190.3	191.7	193.1

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 20. Consumer expenditures for meats, baseline projections**

	Selected history 1/		1995	1996	1997	1998	1999	2000
	1991	1992						
Beef, dollars per person	192.33	189.53	196.40	199.73	204.94	210.41	215.19	220.88
Percent of income	1.15	1.09	0.98	0.95	0.92	0.90	0.88	0.86
Percent of meat expenditures	51.52	51.35	49.90	49.69	49.76	49.62	49.28	49.07
Pork, dollars per person	106.76	104.07	113.61	116.20	119.17	122.60	126.42	130.29
Percent of income	0.64	0.60	0.57	0.55	0.54	0.53	0.51	0.50
Percent of meat expenditures	28.60	28.19	28.86	28.91	28.93	28.91	28.95	28.95
Broilers, dollars per person	56.27	58.05	64.69	66.53	68.82	71.79	75.34	78.87
Percent of income	0.34	0.33	0.32	0.32	0.31	0.31	0.31	0.31
Percent of meat expenditures	15.07	15.73	16.44	16.55	16.71	16.93	17.25	17.52
Turkeys, dollars per person	17.94	17.47	18.91	19.49	18.96	19.27	19.71	20.09
Percent of income	0.11	0.10	0.09	0.09	0.09	0.08	0.08	0.08
Percent of meat expenditures	4.81	4.73	4.80	4.85	4.60	4.54	4.51	4.46
Total meats, dollars per person	373.30	369.11	393.61	401.95	411.89	424.08	436.67	450.12
Percent of income	2.24	2.13	1.96	1.90	1.86	1.82	1.78	1.74

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 21. Beef baseline projections**

	Unit	Selected history 1/							
		1991	1992	1995	1996	1997	1998	1999	2000
Beginning stocks	Mil. lbs.	397	419	400	400	400	400	400	400
Commercial production	Mil. lbs.	22,800	22,968	24,820	25,259	25,484	25,413	25,243	25,176
Farm production	Mil. lbs.	117	118	117	117	117	117	117	117
Total production	Mil. lbs.	22,917	23,086	24,937	25,376	25,601	25,530	25,360	25,293
Imports	Mil. lbs.	2,406	2,440	2,340	2,420	2,520	2,540	2,470	2,470
Total supply	Mil. lbs.	25,720	25,945	27,677	28,196	28,521	28,470	28,230	28,163
Exports	Mil. lbs.	1,188	1,324	1,440	1,490	1,500	1,560	1,600	1,720
Ending stocks	Mil. lbs.	419	360	400	400	400	400	400	455
Total consumption	Mil. lbs.	24,113	24,261	25,837	26,306	26,621	26,510	26,230	25,988
Per capita, carcass wgt	Pounds	95.4	95.0	98.2	99.2	99.6	98.4	96.6	95.0
Per capita, retail wgt	Pounds	66.8	66.5	68.7	69.4	69.7	68.9	67.6	66.5
Prices:									
Beef cattle, farm	\$/cwt	72.87	71.33	71.98	71.69	72.98	75.77	79.39	82.95
Calves, farm	\$/cwt	99.94	89.38	80.31	76.14	81.27	85.84	91.14	95.68
Choice steers, Nebraska	\$/cwt	74.28	75.36	72.72	72.42	73.73	76.54	80.20	83.79
Yrlg steers, Okla City	\$/cwt	92.74	85.57	76.75	72.76	77.66	82.02	87.09	91.43
Costs and returns, cow-calf enterprise:									
Variable expenses	\$/cow	183.46	175.75	191.01	193.36	198.13	200.89	203.82	207.23
Fixed expenses	\$/cow	106.12	105.45	103.49	103.57	104.48	105.46	106.53	108.14
Total cash expenses	\$/cow	289.58	281.20	294.50	296.93	302.61	306.35	310.35	315.38
Returns above cash costs	\$/cow	107.74	85.40	34.30	14.78	30.10	45.04	62.75	76.32
Cattle inventory	1000 head	98,896	99,559	104,142	104,161	103,993	103,797	103,871	104,404
Beef cow inventory	1000 head	33,271	33,775	35,473	35,573	35,454	35,458	35,618	35,980

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.



**Table 22. Pork baseline projections**

	Unit	Selected history 1/		1995	1996	1997	1998	1999	2000
		1991	1992						
Beginning stocks	Mil. lbs.	296	388	385	385	385	385	385	385
Commercial production	Mil. lbs.	15,948	17,185	17,697	16,943	16,696	16,928	17,302	17,667
Farm production	Mil. lbs.	51	49	51	51	51	51	51	51
Total production	Mil. lbs.	15,999	17,234	17,748	16,994	16,747	16,979	17,353	17,718
Imports	Mil. lbs.	775	645	680	703	717	721	706	693
Total supply	Mil. lbs.	17,070	18,267	18,813	18,082	17,849	18,085	18,444	18,796
Exports	Mil. lbs.	283	407	462	464	495	527	551	583
Ending stocks	Mil. lbs.	388	385	385	385	385	385	385	350
Total consumption	Mil. lbs.	16,399	17,475	17,966	17,233	16,969	17,173	17,508	17,863
Per capita, carcass wgt	Pounds	64.9	68.4	68.3	65.0	63.5	63.7	64.5	65.3
Per capita, retail wgt	Pounds	50.4	53.1	53.0	50.4	49.3	49.5	50.0	50.6
Prices:									
Hogs, farm	Doll. per cwt	48.78	41.82	44.43	51.76	56.24	57.35	57.59	57.70
Iowa, So. Minn. market	Doll. per cwt	49.69	43.03	45.43	52.76	57.24	58.35	58.59	58.70
Costs and returns, farrow to finish:									
Variable cash expenses	Doll. per cwt	33.06	34.12	33.96	34.06	34.66	34.81	34.96	35.29
Fixed cash expenses	Doll. per cwt	7.68	7.56	7.18	7.13	7.19	7.22	7.28	7.39
Total cash expenses	Doll. per cwt	40.75	41.67	41.14	41.19	41.86	42.03	42.24	42.68
Returns above cash costs	Doll. per cwt	7.45	0.07	2.93	9.99	13.67	14.57	14.59	14.25
Hog inventory,									
Dec. 1, previous year	1000 head	54,477	57,684	60,252	57,863	57,082	57,815	59,002	60,155

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 23. Young chicken baseline projections**

	Unit	Selected history 1/		1995	1996	1997	1998	1999	2000	
		1991	1992							
Beginning stocks	Mil. lbs.	26	36	30	30	30	30	30	30	
F.I. slaughter	Mil. lbs.	19,728	21,052	23,656	24,285	24,950	25,616	26,310	27,025	
Production	Mil. lbs.	19,591	20,907	23,492	24,117	24,777	25,438	26,127	26,837	
Total supply	Mil. lbs.	19,617	20,943	23,522	24,147	24,807	25,468	26,157	26,867	
Exports	Mil. lbs.	1,261	1,489	1,850	1,900	1,950	2,000	2,040	2,080	
Ending stocks	Mil. lbs.	36	33	30	30	30	30	30	25	
Consumption	Mil. lbs.	18,320	19,421	21,642	22,217	22,827	23,438	24,087	24,762	
Per capita, carcass wgt	Pounds	72.5	76.0	82.3	83.8	85.4	87.0	88.7	90.5	
Per capita, retail wgt	Pounds	63.9	66.8	72.3	73.7	75.1	76.5	78.0	79.5	
Prices:										
Broilers, farm	Cents per lb.	30.90	31.90	32.90	33.20	33.70	34.50	35.50	36.50	
12-city market price	Cents per lb.	52.00	52.60	54.82	55.36	56.19	57.54	59.23	60.77	
Costs and returns:										
Total costs	Cents per lb.	47.00	49.60	48.68	49.60	50.86	51.91	53.03	54.27	
Net returns	Cents per lb.	5.00	3.00	6.14	5.77	5.33	5.64	6.20	6.50	

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 24. Turkey baseline projections**

	Unit	Selected history 1/		1995	1996	1997	1998	1999	2000
		1991	1992						
Beginning stocks	Mil. lbs.	306	264	260	260	260	260	260	260
F.I. slaughter	Mil. lbs.	4,652	4,829	5,300	5,900	6,286	6,722	7,090	7,410
Production	Mil. lbs.	4,603	4,778	5,247	5,847	6,233	6,669	7,037	7,357
Total supply	Mil. lbs.	4,909	5,042	5,507	6,107	6,493	6,929	7,297	7,617
Exports	Mil. lbs.	103	171	212	224	236	248	250	262
Ending stocks	Mil. lbs.	264	272	260	260	260	260	260	260
Consumption	Mil. lbs.	4,542	4,599	5,035	5,623	5,997	6,421	6,787	7,095
Per capita	Pounds	18.0	18.0	19.1	21.2	22.4	23.8	25.0	25.9
Prices:									
Turkey, farm	Cents per lb.	37.70	37.70	35.80	34.00	32.60	32.00	31.90	32.00
Hen turkey (whsle) East	Cents per lb.	61.30	60.20	59.70	56.62	54.28	53.37	53.20	53.33
Costs and returns:									
Total costs	Cents per lb.	60.30	57.39	55.08	45.91	47.88	48.73	49.22	49.67
Net returns	Cents per lb.	1.00	2.81	4.61	10.71	6.40	4.64	3.98	3.66

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 25. Egg baseline projections**

	Unit	Selected history 1/		1995	1996	1997	1998	1999	2000
		1991	1992						
Beginning stocks	Mil. doz.	12	13	12	13	14	13	14	13
Production	Mil. doz.	5,758	5,883	5,962	5,974	5,986	5,998	6,010	6,022
Imports	Mil. doz.	2	4	5	10	3	10	5	10
Total supply	Mil. doz.	5,772	5,900	5,978	5,997	6,003	6,021	6,029	6,045
Hatching use	Mil. doz.	708	728	850	875	900	925	950	975
Exports	Mil. doz.	154	157	157	154	155	150	155	150
Ending stocks	Mil. doz.	13	14	13	14	13	14	13	14
Consumption	Mil. doz.	4,896	5,001	4,958	4,954	4,935	4,932	4,911	4,906
Per capita	Number	232.5	235.0	226.2	224.2	221.5	219.7	217.0	215.1
Prices:									
Eggs, farm	Cents per doz.	66.3	56.4	62.3	67.5	63.1	68.3	64.9	67.5
New York, Grade A large	Cents per doz.	77.5	65.4	72.0	78.0	73.0	79.0	75.0	78.0
Costs and returns:									
Total costs	Cents per doz.	66.10	55.60	74.96	75.73	76.78	77.98	79.51	81.07
Net returns	Cents per doz.	11.40	9.80	-2.96	2.27	-3.78	1.02	-4.51	-3.07

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

**Table 26. Dairy baseline projections**

	Units	Selected history 1/							
		1991/92	1992/93	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
Milk production	Bil. lbs.	150.9	151.2	158.4	158.5	159.0	160.5	162.4	163.5
Commercial use	Bil. lbs.	141.3	143.7	151.9	153.5	155.0	156.5	158.4	159.5
Net removals:									
Milkfat basis	Bil. lbs.	10.3	8.3	7.2	5.7	4.7	4.7	4.7	4.7
Total solids	Bil. lbs.	5.3	5.7	7.2	5.7	4.7	4.7	4.7	4.7
Production data:									
Number of cows	Thousand	9,868	9,755	9,445	9,320	9,200	9,120	9,040	8,965
Milk per cow	Pounds	15,296	15,495	16,770	17,005	17,275	17,595	17,960	18,235
bST use	Percent of cows	0	0	30	33	35	40	45	50
Prices:									
Support	Doll. per cwt	10.10	10.10	10.10	10.10	10.35	10.35	10.60	10.60
All milk	Doll. per cwt	13.25	12.80	12.00	12.40	12.70	12.80	12.95	13.05
Assessments	Doll. per cwt	0.097	0.113	0.117	0.113	0.113	0.113	0.113	0.113
Effective price	Doll. per cwt	13.15	12.69	11.88	12.29	12.59	12.69	12.84	12.94
Costs and returns:									
Concentrate costs	Doll. per cwt milk	4.09	4.03	4.22	4.30	4.35	4.38	4.43	4.54
Other cash costs	Doll. per cwt milk	7.20	7.35	7.45	7.55	7.65	7.70	7.75	7.80
Returns above cash costs	Doll. per cwt milk	1.86	1.31	0.21	0.44	0.59	0.61	0.66	0.60

1/ Historical data as of June 1993.

Note: Baseline projections shown in this report present one plausible scenario, representative of the long-term direction for the agricultural sector. The projections are a conditional, current law (as of June 1993) scenario with no shocks, based on a special set of assumptions regarding the macroeconomy, the weather, and international developments. The projections were prepared in June 1993, based on policy decisions and other information known at that time. The short-term outlook would now differ from that used in these baseline projections, although it is expected that by 1995 the agricultural sector will have adjusted to the near-term disruptions in supply and use.

## Farm Income and Food Prices

Aggregate indicators for the agricultural sector of farm income and retail food prices are projected from the commodity projections discussed in other sections.

### Farm Income

Net farm income in this baseline scenario is projected to be relatively constant in nominal terms from 1995 to 2000, remaining about \$4 billion lower than the 1992 record. Increases in cash receipts are offset by rising production expenses and declining direct Government payments. Farm incomes increasingly reflect returns from the marketplace instead of agricultural program income supports.

Cash receipts rise for both crops and livestock, reflecting higher output as well as increasing nominal prices. The decline in Government payments primarily reflects target prices being fixed and market prices generally rising.

Increases in production expenses are led by gains in non-farm origin inputs, with costs for farm-origin inputs increasing proportionately less. Increased farm output is only partly achieved through productivity gains in the sector, raising demand for agricultural inputs. Higher energy prices and more crop acreage contribute to increases in expenses for manufactured inputs. Labor expenses rise, reflecting higher wage rates as well as increased labor requirements due to increases in crop and livestock production. Interest expenses rise reflecting higher short-term interest rates and increases in agricultural debt.

The balance sheet of farmers will improve slightly in the second half of the 1990s. Higher nominal farm incomes and relatively low interest rates assist in asset accumulation and debt management. Farm sector assets are projected grow at near the rate of inflation from 1995 to 2000, exceeding \$1 trillion by 1998. A steady farm economy combined with moderate increases in interest rates suggest that farmers may acquire more debt, but debt accumulation will be somewhat slower than asset gains. Thus, debt-to-asset and debt-to-equity ratios are projected to decline through the end of the decade. Projected debt-to-asset ratios of about 15 percent and debt-to-equity ratios near 18 percent compare to 23 percent and 30 percent ratios, respectively, in 1985.

Average farm operator household income in 1992 was \$40,068, with \$4,337 or 11 percent from farm sources. These averages are heavily influenced by the 1.7 million farm households operating small farms and mainly dependent on off-farm income for their living. Over the last half of the 1990s, average farm operator household income from farm sources is projected to be nearly flat at levels somewhat above those of 1991 and 1992. Off-farm sources will continue to provide the major portion of average farm operator household income.

## **Retail Food Prices**

The consumer price index (CPI) for food is expected to rise moderately in the second half of the 1990s, at an average rate of 3.1 percent per year. This compares to a 3.4 percent average rise expected in the CPI for all items and continues a long-term trend of food prices increasing at slightly less than the general inflation rate. Moderate but steady economic growth with sustained increases in disposable personal income will have a positive impact on consumer demand for food.

A large service component will push prices for food away from home up more than prices for food purchased in grocery stores. For foods purchased for consumption at home, the strongest price rises generally occur among the more highly processed foods such as cereals and bakery products and other prepared foods. Prices for these foods are related more to the costs of processing and marketing than to the costs of farm commodities and, therefore, rise at a rate close to the general inflation rate.

Total food expenditures will rise at a 4.7 percent average annual rate in the second half of the 1990s, but food expenditures will continue to account for a declining share of disposable income. Expenditures for meals eaten away from home will account for a growing share of food spending, reaching nearly half of total food expenditures by 2000. Growth in expenditures for food eaten away from home are projected to average 5.4 percent per year from 1995 to 2000 while expenditures for food at home are projected to rise 4.1 percent per year.

**Table 27. Farm receipts, expenses, and incomes, baseline projections**

	Selected history 1/		1995	1996	1997	1998	1999	2000
	1991	1992						
Billion dollars								
Cash receipts:								
Crops	81.9	84.8	86.3	88.9	91.1	93.0	94.9	97.2
Livestock and products	86.8	86.4	88.2	90.3	93.5	96.9	100.0	103.5
All commodities	168.7	171.2	174.6	179.2	184.6	189.9	194.9	200.7
Government payments	8.2	9.2	10.4	9.2	8.3	7.9	7.5	7.0
Value of inventory change	-0.3	3.9	1.4	0.5	0.5	0.3	0.7	1.1
Gross cash income	184.7	187.6	193.1	196.8	201.4	206.6	211.4	217.0
Gross farm income	190.3	197.8	200.4	203.4	208.4	213.7	219.3	225.6
Cash expenses	131.3	130.1	133.9	136.1	140.8	145.1	149.9	155.0
Total production expenses	150.3	149.1	155.6	158.4	163.9	169.0	174.6	180.4
Net cash income	53.4	57.5	59.2	60.7	60.6	61.4	61.5	62.0
Net farm income	40.0	48.7	44.8	45.0	44.5	44.7	44.8	45.2
Total farm assets	843.9	861.2	926.5	958.5	993.7	1,027.2	1,058.6	1,087.4
Total farm debt	138.8	138.3	143.1	146.1	150.3	155.0	159.8	164.7
Percent								
Debt/equity ratio	19.7	19.1	18.3	18.0	17.8	17.8	17.8	17.8
Debt/assets ratio	16.4	16.1	15.4	15.2	15.1	15.1	15.1	15.1

**Table 28. Farm receipts, expenses, and incomes in 1987 dollars, baseline projections**

	Selected history 1/		1995	1996	1997	1998	1999	2000
	1991	1992						
Billion 1987 dollars 2/								
Cash receipts:								
Crops	69.5	70.1	65.6	65.5	65.0	64.2	63.5	62.9
Livestock and products	73.7	71.5	67.0	66.5	66.7	66.9	66.9	67.0
All commodities	143.2	141.6	132.6	132.1	131.6	131.2	130.4	130.0
Government payments	7.0	7.6	7.9	6.8	5.9	5.4	5.0	4.6
Value of inventory change	-0.3	3.2	1.1	0.3	0.4	0.2	0.5	0.7
Gross cash income	156.8	155.2	146.8	145.0	143.6	142.7	141.4	140.5
Gross farm income	161.5	163.6	152.3	149.9	148.7	147.6	146.7	146.1
Cash expenses	111.5	107.6	101.7	100.3	100.4	100.2	100.3	100.4
Total production expenses	127.6	123.3	118.2	116.7	116.9	116.7	116.8	116.9
Net cash income	45.3	47.6	45.0	44.7	43.2	42.4	41.2	40.2
Net farm income	34.0	40.3	34.1	33.2	31.8	30.9	29.9	29.3
Total farm assets	716.4	712.3	704.0	706.4	708.8	709.4	708.1	704.3
Total farm debt	117.8	114.4	108.7	107.6	107.2	107.0	106.9	106.6

1/ Historical data as of June 1993.

2/ Nominal dollar values divided by the GDP deflator.



**Table 29. Average nominal and real income to farm operator households, baseline projections**

	Selected history 1/		1995	1996	1997	1998	1999	2000
	1991	1992						
Dollars per operator household								
Farm income to household	4,397	4,337	4,823	5,000	4,921	4,978	4,925	4,932
Off-farm income	31,638	35,731	38,061	39,812	41,723	43,684	45,737	47,887
Farm operator household income	36,035	40,068	42,884	44,812	46,644	48,662	50,662	52,819
1987 dollars per operator household 2/								
Farm income to household	3,733	3,587	3,665	3,684	3,510	3,438	3,294	3,194
Off-farm income	26,857	29,554	28,922	29,338	29,760	30,169	30,593	31,015
Farm operator household income	30,590	33,141	32,587	33,022	33,270	33,607	33,888	34,209

1/ Historical data as of June 1993.

2/ Nominal dollar values divided by the GDP deflator.

**Table 30. Consumer food price indexes and food expenditures, baseline projections**

CPI category	Selected history		1995	1996	1997	1998	1999	2000
	1991	1992						
Consumer price indexes: 1982-84 = 100								
All food	136.2	138.0	148.1	152.7	157.2	162.2	167.3	172.6
Food away from home	137.9	140.8	153.4	158.4	164.0	169.7	175.5	181.4
Food at home	135.8	136.9	145.6	149.9	153.8	158.3	163.1	168.0
Meats	132.5	130.7	134.4	138.8	143.0	147.9	153.9	159.4
Beef and veal	132.4	132.3	133.1	135.0	137.9	143.3	150.4	157.0
Pork	134.1	127.8	139.3	149.7	157.2	161.1	164.3	167.2
Other meats	131.5	131.7	131.6	133.4	136.4	141.7	148.7	155.2
Poultry	131.5	132.0	137.4	136.6	136.0	137.4	140.0	142.4
Fish and seafood	148.3	152.0	164.1	168.5	173.4	178.5	183.6	188.8
Eggs	121.2	108.3	114.9	125.5	119.5	129.2	124.7	129.6
Dairy products	125.1	128.5	135.0	140.0	144.5	148.5	153.0	157.0
Fats and oils	131.7	130.0	136.5	140.0	143.2	146.0	149.5	153.0
Fruits and vegetables	155.9	155.5	164.5	168.8	173.6	178.5	183.8	189.7
Sugar and sweets	129.3	133.1	146.0	149.0	153.0	158.0	162.0	166.0
Cereals and bakery products	145.8	151.3	167.0	172.0	177.0	183.0	188.0	194.0
Nonalcoholic beverages	114.1	114.4	121.0	124.0	127.0	130.0	133.5	137.0
Other prepared foods	137.1	140.0	155.0	160.0	164.0	168.0	174.0	179.0
Food expenditures: Billion dollars								
Total food	570.4	592.4	675.0	706.4	739.7	775.2	811.7	849.9
At home	312.7	324.2	365.4	380.5	395.8	412.4	429.3	447.0
Away from home	257.7	268.2	309.6	325.9	343.9	362.8	382.4	402.9

**Table 31. Changes in consumer food prices, baseline projections**

CPI category	Selected history		1995	1996	1997	1998	1999	2000
	1991	1992						
	Percent							
All food	2.9	1.3	2.8	3.1	2.9	3.2	3.1	3.2
Food away from home	3.4	2.1	3.2	3.3	3.5	3.5	3.4	3.4
Food at home	2.6	0.8	2.5	3.0	2.6	2.9	3.0	3.0
Meats	3.1	-1.4	1.7	3.3	3.0	3.4	4.1	3.6
Beef and veal	2.8	-0.1	0.8	1.4	2.1	3.9	5.0	4.4
Pork	3.3	-4.7	4.0	7.5	5.0	2.5	2.0	1.8
Other meats	3.7	0.2	0.8	1.4	2.2	3.9	4.9	4.4
Poultry	-0.8	0.4	2.5	-0.6	-0.4	1.0	1.9	1.7
Fish and seafood	1.1	2.5	2.6	2.7	2.9	2.9	2.9	2.8
Eggs	-2.3	-10.6	2.6	9.2	-4.8	8.1	-3.5	3.9
Dairy products	-1.1	2.7	2.7	3.7	3.2	2.8	3.0	2.6
Fats and oils	4.3	-1.3	1.7	2.6	2.3	2.0	2.4	2.3
Fruits and vegetables	4.7	-0.3	2.6	2.6	2.8	2.8	3.0	3.2
Sugar and sweets	3.7	2.9	2.8	2.1	2.7	3.3	2.5	2.5
Cereals and bakery products	4.1	3.8	3.1	3.0	2.9	3.4	2.7	3.2
Nonalcoholic beverages	0.5	0.3	2.5	2.5	2.4	2.4	2.7	2.6
Other prepared foods	4.5	2.1	3.3	3.2	2.5	2.4	3.6	2.9

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