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### FAPRI U.S. Agricultural Outlook

This publication contains recent baseline projections produced by the Food and Agricultural Policy Research Institute (FAPRI) for the U.S. agricultural sector and international commodity markets. These projections serve as a baseline for evaluating and comparing alternative macroeconomic, policy, weather, and technological scenarios. They are intended for use by farmers, government agencies and officials, agribusinesses, and others who do medium-range and long-term planning.

FAPRI baseline projections are grounded on a series of assumptions about the general economy, agricultural policies, the weather, and technological change. Macroeconomic assumptions are based on forecasts prepared by the WEFA Group and Project LINK. *It is assumed that current agricultural policies will be continued in the United States and other trading nations*. This is an important caveat in a year when the United States is undergoing a fundamental review of agricultural policies. Average weather conditions and historical rates of technological change are also assumed to prevail during the projection period.

FAPRI recognizes that the Agricultural Outlook is the result of efforts made by numerous individuals. These include people within nearly all agencies of USDA, but specifically ASCS, FAS, AMS, NASS, and ERS. We have also followed advice and counsel from individuals throughout the land grant and other university systems, as well as several extension specialists. Industry experts have also contributed by pointing out errors and areas of concern. We acknowledge and appreciate the help of numerous individuals, but we take full responsibility for any errors that may appear.

The projections included in this outlook were prepared in January 1995 based on the best information available at that time.

For a detailed look at international markets, see FAPRI Staff Report #2-95, FAPRI 1995 International Agricultural Outlook.

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Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U.S. Department of Agriculture.

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### **Abbreviations and Acronyms**

This list of abbreviations and acronyms used in the *Agricultural Outlook* is provided for the convenience of our readers. Abbreviations and acronyms typically are not spelled out in the text.

| ARP      | Acreage Reduction Program                              |
|----------|--|
| CAP      | Common Agricultural Policy                             |
| CBO      | Congressional Budget Office                            |
| CCC      | Commodity Credit Corporation                           |
| CIF      | Cost, Insurance and Freight                            |
| CPI      | Consumer Price Index                                   |
| CRP      | Conservation Reserve Program                           |
| cwt      | hundredweight  |
| DEIP     | Dairy Export Incentive Program                         |
| EEP      | Export Enhancement Program                             |
| EU       | European Union   |
| ECU      | European currency unit                                 |
| FACTA-90 | Food, Agriculture, Conservation, and Trade Act of 1990 |
| FAPRI    | Food and Agricultural Policy Research Institute        |
| FOB      | free on board  |
| FOR      | Farmer-Owned Reserve                                   |
| GATT     | General Agreement on Tariffs and Trade                 |
| GRIP     | Gross Revenue Insurance Plan                           |
| GDP      | gross domestic product                                 |
| ha       | hectare  |
| HFCS     | high-fructose corn syrup                               |
| MGA      | maximum guaranteed area                                |
| MGQ      | maximum guaranteed quantity                            |
| mmt      | million metric tons                                    |
| mt       | metric ton   |
| NAFTA    | North American Free Trade Agreement                    |
| NFA      | net flexed area  |
| OBRA-90  | Omnibus Budget Reconciliation Act of 1990              |
| OBRA-93  | Omnibus Budget Reconciliation Act of 1993              |
| PLD      | Paid Land Diversion                                    |
| rBST     | recombinant bovine somatotropin                        |
| tmt      | thousand metric tons                                   |

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### **Causes of Uncertainty**

This volume contains FAPRI's "1995 U.S. Baseline," the benchmark numbers used as reference points for policy analysis. The baseline was completed in mid-January and is centered on information available at that time. These ten-year projections, representing a composite of model results and analysts' judgments about future U.S. and international policy, crop and livestock production, consumption, and trade, exhibit some demand softness in the early years, but show general market tightening over the latter half of the projection period. Many factors interact in producing results, and the projections in this publication represent only one possible scenario; a scenario that is fixed by the set of assumptions employed and the judgments incorporated.

The baseline is developed each fall, subsequent to the November production estimates by the U.S. Department of Agriculture (USDA) for crops in the Northern Hemisphere. The baseline is subjected to considerable peer review, with more than 100 outside individuals providing commentary during a formal review conference held the first week of January. Subsequent to the review, and after receiving the January crop production figures from the USDA, the baseline is finalized.

The baseline assumes that GATT-consistent policies currently in place in the United States and other countries remain in place for the coming decade. If those policies already contain provisions for annual or planned modification, then such changes are made as the outlook or analysis is being conducted. For example, the United States formulates policies that adjust acreage set-aside rates as stocks of commodities vary. In generating a baseline, it is assumed that such a program remains in force. Consequently, the analysts are required in part to act like the Secretary of Agriculture, and assume particular set-aside rates, operation of the Farmer Owned Reserve, and numerous other policy actions and reactions.

Because perfect foresight does not exist, any projection into the future entails some degree of uncertainty. In agricultural projections, a great deal of short-run uncertainty arises from supply volatility due to droughts, floods, outbreaks of pests, and other natural events. Mid-and long-term uncertainty derives from imperfect information on general economic growth, political change, and policy reform.

The FAPRI baseline assumes average weather, continuation of current agricultural policies, political stability in nations around the globe, and incorporates assumptions on macroeconomic variables such as exchange rates and growth in GDP. None of these assumptions ever fully materialize. For instance, average weather is all but certain not to occur. The dampness or the dryness of 1993, depending on the region of the United States, and the unusually favorable atmospheric conditions of 1994 underscore this point. The recent macroeconomic developments in Mexico and the political change still occurring in Eastern Europe and the former Soviet Union highlight situations generating some of the other areas of uncertainty.

At the time of this writing, a great deal of uncertainty exists regarding the economic and political situation in China. This Asian economy has sustained very rapid growth over the past few years and it is not clear if that degree of growth can be sustained over the projection period. Moreover, China's recent trade policies, have exhibited volatility and have been difficult to anticipate before the fact. Assumptions on these items play a part in baseline development and contribute to the scenario presented in this document.

Thus, the reader is forewarned that the projections are founded on certain assumptions. And as actual events occur that make the assumptions no longer viable, then the projections also require revisions. It is hoped however that, in general, errors across variables will offset one another so that the end result is, on average, realistic.

### Summary of the 1995 U.S. Outlook

In developing the baseline, FAPRI utilized two sources of information for projections on the general economy. The WEFA group provided projections on the economy in the United States and other countries and regions worldwide. Project Link of the United Nations also generated projections on the growth of other economies around the world. This year, however, we relied primarily on WEFA macroeconomic projections, since Project Link figures were not available for the full ten-year period. For the most part, the projections regarding the performance of the world economy are favorable. The domestic picture is somewhat less optimistic.

According to WEFA, economic recovery in the United States loses momentum in 1995, with real GDP growing by less than 3 percent. The WEFA group then forecasts a mild drop, with growth ranging between 2 and 2.6 percent per year for the remainder of the projection period. Interest rates are predicted by the WEFA group to substantially increase again in 1995, and to continue their rise from recent low levels. Interest rates do lessen somewhat in the later years of the baseline. The WEFA group anticipates no great increase in the U.S. inflation rate. After several years of the extremely slow pace of the last recession, inflation picks up very little throughout the 1990s, barely exceeding 3.5 percent.

The world economy is anticipated to show improvement in 1995, with the equivalent of real GDP growth rising from 1.9 percent in 1994 to 2.8 percent in 1995. In later years, growth is expected to rise to 3.7 percent in 1996, and hold steady at levels around 3.5 percent for the remainder of the projection period. China and other developing countries in Asia are expected to demonstrate the strongest growth, with GDP increases in China of over 9 percent in most years and over 6 percent annually in Developing Asia. This creates a very strong base of demand for world agricultural products. Latin America is also expected to grow nearly 5 percent in most years, with Eastern Europe around 4 percent.

Only the countries of the Former Soviet Union are expected to show contraction through 1995, 1996, and 1997. It is not anticipated that this region will begin to show recovery until 1998. Even then, with growth in the 5 percent range, the overall economy is expected to be so weak that it will take many years before the region returns to levels of economic activity similar to those seen as recently as 1989.

With the exception of the Former Soviet Union, the world economic growth picture is fairly strong. This level of continued growth should present many opportunities for growth in exports. However, much of the growth in exports will likely be in the form of finished products, such as meats, with less focus on raw products. Consider poultry products and soybean meal exports as an example. While the FAPRI baseline anticipates modest growth in soybean meal exports, shipments of broilers are expected to increase by more than 1 billion pounds during the forecast. Given the preponderance of soybean meal as a feed for the broiler industry, this implies a fairly strong rate of growth in overall soybean meal exports, in one form or another.

#### **Feed Grains**

Under the 1995 FAPRI baseline, the ARP rate for corn is projected to be 5 percent for the 1996/97 through 1999/00 crops, falling to 2.5 percent for the next two years, then finally dropping to 0 percent with the 2002/03 crop. The lower ARP rates, and expiring CRP contracts, bring corn planted area up to 82.4 million acres by 2003/04. Lower prices increase feed use to 5.6 billion bushels in the 1994/95 marketing year. Feed use should decline in 1995/96 to 5.3 billion bushels. Following livestock cycles, feed use should reach 5.7 billion bushels by 2002/03. Ethanol use should show strong growth through the period, with consumption reaching 875 million bushels by 2003/04. High-fructose corn syrup demand is expected to follow population growth rates as that market has matured. Exports of corn increased in 1994/95, in response to lower prices and other changes in world supplies. Exports are expected to drop slightly in 1995/96 as production in several other countries is expected to recover. In subsequent years, exports show steady growth, reaching 2.3 billion bushels by the end of the period. Stock holdings of corn should recover somewhat with the 1994/95 marketing year. Generally, ending stocks are expected to stay below 1.6 billion bushels. Corn prices should recover somewhat in 1995/96, then move lower through the 1997/98-99/00 marketing years as corn acreage expands with CRP contract expiration. Subsequently, corn prices are expected to move toward and exceed the \$2.30 per bushel level for the remainder of the baseline.

Sorghum, barley, and oat ARP rates are set at 0 percent for the entire baseline. Plantings of all three feed grains increase as the CRP expires. Sorghum plantings are up to 11.3 million acres by 1999/00. Barley approaches 8.5 million acres by 1997/98, with oat acreage holding near 7 million acres. Domestic

utilization of all three commodities is fairly steady. Oat usage remains around the 300 million bushel level. with barley domestic use (for the food sector in particular) moving upward by 20 million bushels during the projection period. Sorghum feed use follows the cattle cycle, rising more than 10 percent from 1994/95 levels by 1999/00. Sorghum feed use stands around 450 million bushels for the rest of the period. Sorghum stocks move up slightly from the current 75 million bushel level to 90 million bushels by 1997/98 and hold at that level. Barley and oat stocks are also fairly stable, around 100 to 110 million bushels each. Prices for the three feed grains closely parallel corn price movements, with traditional adjustments for the feed value of the product in question.

#### Soybeans

#### Soybeans

Soybean plantings have benefited from the planting flexibility provisions of the 1990 Acts, with over 4.5 million acres flexed into soybeans in 1993/94 and 5.9 million acres in 1994/95. Net flex into soybeans is expected to stay near the 5.0 million acre level for much of the baseline. Soybean plantings should stay in the 60 to 63 million acre level for the projection, with much of the growth in soybean plantings occurring in the later years of the projection. Expiration of CRP contracts brings soybean land as well as the program crops back into production. Domestic use of soybeans should show good, steady growth through the period, after a decline from 1994/95 levels. Crush demand in particular should rise from 1.31 billion bushels in 1995/96 to 1.51 billion bushels by 2003/04, much of this increase in crush demand being fueled by growing meat export demand. Exports of soybeans are expected to hold between 730 and 830 million bushels from 1995/96 through 2003/04. Soybean stocks persist around 300 to 400 million bushels for most years of the forecast. Soybean prices should show some upward pressure in the later years of the projection, rising to over \$6.00 per bushel in 2002/03.

#### **Food Grains**

Expiration of CRP contracts will probably affect wheat plantings more than any other crop. After falling to 70.4 million acres with the 1994/95 crop, wheat plantings should recover to 71.1 million acres in 1995/96. By 2000/01, wheat area should be up to 75.7 million acres, and put on an additional 2 million acres by the end of the baseline. Domestic utilization of wheat will show slow, steady growth. Food use in particular is expected to move up with population growth, but even so, should approach 1.0 billion bushels by the end of the period. Export demand for wheat continues to rely on the Export Enhancement Program (EEP). Exports should hold near the 1.2 billion bushel mark through the 1997/98 crop year, finally showing some recovery in 1998/99 and beyond. Exports should approach the 1.477 billion bushel mark by 2003/04. Wheat stocks stay fairly tight. Remaining at less than 600 million bushels throughout the period, the possibility of actual weather conditions generating extreme price volatility in the outer years is very high. The baseline, with its normal weather assumption, keeps prices below the \$3.15 per bushel rate for much of the 1990s. By 2000/01, wheat prices are expected to rise to \$3.33 per bushel, and show continued upward pressure in the later years.

Rice area should decline marginally in 1995/96 with the 5 percent ARP. In all later years, the baseline projects a zero ARP for rice. Rice area is expected to fall to just under 3 million acres in 1995/96, then recover to 3.14 million acres in 1996/97. Rice area should hold above 3.1 million acres for most of the baseline. Domestic demand growth continues to move the rice industry. While domestic use dropped to 101.9 million cwt. in 1994/95, usage is expected to reach 117.6 million cwt. by the 2003/04 marketing year. Exports of rice were up in 1994/95 to 87.8 million cwt. Exports should be relatively flat for much of the projection period, holding around 80 million cwt. for most of the period.

#### Cotton

The cotton market has gone through some interesting fluctuations in the past few months. Cotton plantings for the 1995/96 growing season are expected to reflect some of the recently observed upward price pressure, as area planted should reach 15.7 million acres in 1995/96. With zero ARPs for the 1996/97 crop year as well, cotton plantings should stay near 15 million acres. It is anticipated that the Secretary of Agriculture will revert to a set-aside program for the 1997/98 crop, raising the ARP rate to 10 percent for the 1998/99 crop year, and all subsequent years of the baseline. Cotton is the only crop with an ARP expected for the last two years of the baseline. Domestic use of cotton continues to be a major driver of overall demand. At 10.8 million bales in the 1994/95 crop year, mill use should rise to nearly 13 million bales by the end of the period. Export usage of cotton should reflect recovery in production in many cotton using and exporting countries. Exports should be off nearly 1 million bales in 1995/96, and move

downward toward a 6.5 million bale level by 2002/03. Cotton prices are expected to moderate somewhat in 1995/96 as production in the United States and around the world increases. Prices should stay in the \$0.58 to \$0.62 per pound range for much of the projection period. Should production problems persist in other countries however, the United States should be well positioned to move into the export market.

#### Beef

Beef production is expected to increase in 1995, relative to 1994, and continue to grow through 1998. With modest declines in production in 1999, production should slide through 2003. Recovery in production is expected in the last year of the baseline. Beef prices should move opposite to production. Nebraska 1100-1300 lbs. direct steer prices should fall by 2 to 5 percent per year from 1995 through 1997. Prices should move up each year from 1998 through 2003, with prices falling again in 2004. Consumer prices for beef should remain fairly steady. From the \$2.79 per pound nominal retail price in 1995, prices should fall to \$2.70 per pound in 1997, moving up to \$3.02 per pound by 2003. Per capita consumption of beef is expected to peak in 1996 at 68.1 pounds per capita, retail weight, then decline throughout much of the remainder of the baseline. Higher exports should absorb part of the increased production, with the United States actually in a net export position on a weight basis in 1998. Exports decline after 1998, as overall beef production falls, while imports of product remain relatively constant.

#### Pork

Pork continues to gain in production efficiency, particularly with respect to litter size standpoint, but also from a feed standpoint. Production of pork should show little change in 1995 and 1996, relative to 1994 production levels. By 1997 however, production is expected to increase and continue to grow in 1998. The same four-year pattern is expected--flat production for two years followed by increases in the following two years for much of the remainder of the baseline. Exports of pork products are expected to increase sharply during the baseline. Pork exports should be just under 500 million pounds in 1995, but should exceed 1.5 billion pounds by the end of the baseline. This will help to mitigate some of the price effects of higher pork production. The increase in export markets should be strong enough to pull domestic per capita consumption down somewhat through the 1990s and into the next century. Pork consumption was at

53.1 pounds per capita retail weight in 1994, and is expected to maintain that level for 1995. Consumption should drop to the 52.2 pound level for 1996 through 1998, then fall to 49 to 50 pounds per capita. Prices for 230-250 lbs. Iowa-Southern Minnesota barrows and gilts will mirror the changes in production, moving up in 1995 and 1996, down in 1997 and 1998, up in 1999 and 2000, and so on throughout the baseline. On average, pork prices will be somewhat lower than observed in the past, as the gains in efficiency work through the system.

#### **Broilers**

Death, taxes, and at least 4 percent per year increase in broiler production seem to be some of life's certainties. Broiler production is expected to continue to grow during the baseline, moving from just over 25.2 billion pounds in 1995 to 34.7 billion pounds in 2004. Domestic consumption of poultry is also expected to rise, from 73.7 pounds per capita, retail weight less pet food, to 87.8 pounds per capita in 2004. Exports will also show strength, rising from 3.0 billion pounds in 1995 to 4.2 billion pounds in 2004. Broiler prices will follow competing meats to a certain degree, decreasing in only three years of the next ten. Broiler retail prices should move from \$0.86 per pound in 1995 to \$0.96 per pound in 2004.

#### **Overall Meat Consumption**

Total meat consumed in the United States was just under 209 pounds per capita in 1994. With extra beef and broiler production in 1995, consumption is expected to rise to 213.3 pounds per capita. Growth in overall meat consumption is expected to continue through the forecast period, exceeding 219 pounds per capita in 2004. Nominal expenditures on meats should also show increases. At \$377 per capita in 1995, expenditures should stay below \$400 per capita through 2003. It is only in the last year of the baseline that expenditures finally get to \$400 per capita for beef, pork, broilers, and turkeys. In real terms, meat expenditures should continue to decline.

#### Dairy

Milk production in the United States is expected to continue past growth trends. With the approval of rBST, it is assumed that 25 percent of all dairy cows will receive treatment in 1995. Further, it is assumed that annual production per treated cow will increase by 1,600 pounds over levels that would otherwise be expected. Adoption rates should continue to increase, reaching 35 percent in 1996, 42.5 percent in 1997, and attaining a maximum of 65 percent adoption by 2004. The all-milk price is expected to fall by \$0.66 per cwt. in 1995 to \$12.39 per cwt. Increased milk production, due in part to rBST adoption, should continue to hold prices down through 1997. By 1998, cow numbers should have begun to adjust to the lower prices, and the all-milk price should recover to the \$12.75 per cwt. level. Prices are expected to remain in the \$13.00 per cwt. range for the remainder of the baseline. Dairy cow numbers should fall to less than 9 million head by January 1, 2000, and continue to decline to 8.6 million head by 2004.

Heavy demand for milk in cheese production drives much of the dairy projection. Per capita cheese consumption was 27.7 pounds in 1995, and consumption is expected to grow to 35.3 pounds per capita by 2004. Nonfat dry milk consumption is not expected to be strong enough to keep powder prices much above the support price. Butter prices are also expected to remain at, or close to, support prices. Government removals of dairy products, including shipments under the Dairy Export Incentive Program (DEIP), are expected to average just under 5 billion pounds.

#### **Government Costs**

Government costs associated with the operation of the Commodity Credit Corporation (CCC) and the CRP are expected to total \$11.02 billion for fiscal year 1995. Outlays are expected to remain at, or just under, \$10 billion for the life of the upcoming farm bill, with costs declining in fiscal years 2000 and 2001. Costs are expected to decrease sharply in the latter years of the baseline as prices for wheat and feed grains in particular show strength and as dairy costs also drop. With a reduction in the size of the CRP, rental payments are also falling. By fiscal year 2004, it is expected that the total cost of both the CCC and CRP will be \$6.62 billion.

#### Farm Income

Net farm income reached \$44.2 billion in 1994, with net cash income at \$50.5 billion. Net farm income is expected to fall in 1995 to \$41.1 billion, with net cash income actually rising to \$53.5 billion. The difference in direction is caused primarily by changes in the value of inventory. Net cash income is expected to fall in 1996, due to both a decline in government payments, and an anticipated increase in production costs. Subsequently, net cash income is projected to grow, or meet the previous year's level, in each of the years of the baseline. Net cash income in nominal dollars is expected to reach \$62.6 billion by 2004. Net farm income is also expected to show increases through much of the baseline period. Despite falling to \$40.8 billion in 1996, net farm income should grow in every year thereafter, hitting \$53.2 billion in 2003. Net farm income is projected to decline slightly to \$52.5 billion in 2004. In real terms, net farm income is expected to remain around \$30 to \$32 billion throughout the projection period.

#### **Consumer Food Expenditures**

Food prices are expected to grow at less than the rate of overall inflation. Total per capita expenditure on food is expected to move from just under \$1,700 in 1994 to \$2,165 in 2004 (nominal dollars) for a 28 percent increase. Overall inflation is expected to rise by more than 40 percent implying a continuation of general declines in real food prices.



**Real GDP Growth Rate** 

**U.S. Federal Deficit** 







**U.S. Corn Policy and Market Prices** 

**EU Corn Policy and World Prices** 





### **U.S. Gulf Port Prices**

**U.S. Planted and Idled Area** 



■ Planted I Annual Program Idled I Conservation Reserve



**U.S. Livestock Prices** 

**U.S. Livestock Production** 

**Dollars per CWT** 



**Billion Pounds** 



# **U.S. Grain and Oilseed Net Exports**





# Net CCC Outlays

U.S. Net Farm Income

#### **Billion Dollars**

2



# **Conditioning Assumptions**

- U.S. and World Macroeconomic Assumptions
- U.S. and World Policy Assumptions

# **U.S. and World Macroeconomic Assumptions**

- The U.S. economic recovery loses momentum in 1995 as the **real gross domestic product** (GDP) grows by less than 3 percent. The WEFA Group then forecasts growth ranging between 2.2 and 2.6 percent per year for the remainder of the projection period. No recessions are projected to occur during the projection period.
- Interest rates are predicted by The WEFA Group to increase in 1995. After 1996, interest rates decline slowly for the remainder of the projection period.
- The WEFA Group foresees the **federal deficit** continuing to decline over the projection period. Each year shows further advancement towards balancing the budget.
- The WEFA Group expects U.S. inflation to remain moderate. After the extremely slow pace of the last recession, inflation picks up only slowly throughout the 1990s, barely exceeding 3.5 percent for only a few years.
- Real GDP continued its five-year tailspin in the republics of the **former Soviet Union** in 1994. As restructuring continues, further declines in economic activity in these countries is projected through 1997. By the end of 1997, the economic contraction is projected to be more than 60 percent from the 1989 level. Growth is projected to begin in 1998 and reach more than 5 percent in 2000 and later years.
- Strong economic growth is projected for China and most of Asia over the next ten years. The exception is likely to be Japan, where the mature economy is expected to grow at rates around 4 percent for most of the projection period.
- Led by **Brazil**, Latin America is expected to grow at rates greater than the world average. In the long run, NAFTA is expected to accelerate Mexico's economic development, but the large devaluation of the peso in December 1994 will likely cause some disruption to the economy in the short to medium term.
- GDP growth rates for Africa are projected to be above growth rates for developed countries as a whole. However, high population growth results in low per capita income growth.
- The U.S. dollar weakened against Western European, Japanese, and Australian currencies in 1994. Although there will be some fluctuations over the next few years, the long-term trends are projected to be continued devaluation against the yen and Canadian and Australian dollars. The dollar is expected to strengthen against many of the Western European currencies. In general, the dollar is expected to strengthen against the currencies of developing countries.

|                                    | 1994  | 1995       | 1996  | 1997       | 1998         | 1999             | 2000      | 2001 | 2002 | 2003  | 2004  |
|------------------------------------|-------|------------|-------|------------|--------------|------------------|-----------|------|------|-------|-------|
| United States*                     |       |            |       |            |              |                  |           |      |      | · ·   |       |
| Real GDP                           | 4.1   | 2.9        | 2.5   | 2.3        | (Perc<br>2.2 | ent Chang<br>2.4 | e)<br>2.5 | 2.5  | 2.5  | 2.6   | 2.6   |
| GNP Deflator                       | 2.1   | 2.9        | 3.0   | 2.9        | 2.9          | 3.2              | 3.3       | 3.2  | 3.1  | 3.2   | 3.1   |
| CPI                                | 2.6   | 2.9        | 3.1   | -3.2       | 3.3          | 3.5              | 3.6       | 3.5  | 3.5  | 3.5   | 3.3   |
| Unemployment Rate                  | 6.1   | 5.7        | 5.9   | 6.1        | 6.1          | 5.9              | 5.8       | 5.8  | 5.7  | 5.7   | 5.5   |
| Weighted Exchange Rate             | -2.1  | -0.1       | 1.5   | -2.4       | -2.5         | -2.5             | -2.1      | -1.8 | -1.5 | -1.2  | -0.8  |
| 3-Month Treasury Bill Rate         | 4.2   | 64         | 64    | 62         | (F<br>6 1    | Percent)         | 5.8       | 5.8  | 56   | 5.6   | 56    |
| o-wonth frequery bin reate         | 7,2   | 0.4        | 0.4   | 0.2        | 0.1          | 0.0              | 5.0       | 5.0  | 0.0  | 5.0   | 0.0   |
| Moody's AAA Corporate<br>Bond Rate | 8.0   | 9.0        | 9.0   | 8.6        | 8.3          | 8.1              | 7.8       | 7.7  | 7.6  | 7.6   | 7.5   |
|                                    |       |            |       |            | (Billi       | on Dollars       | )         |      |      |       |       |
| Federal Budget Deficit             | 177.2 | 151.2      | 147.5 | 139.9      | 122.2        | 103.0            | 83.7      | 68.8 | 56.7 | 46.3  | 29.3  |
| Current Account Deficit            | 147.3 | 157.0      | 134.9 | 102.4      | 71.8         | 47.0             | 27.9      | 14.5 | 0.1  | -16.5 | -31.3 |
| Foreign**                          |       |            |       |            |              | llana nar D      | amati     |      |      |       |       |
| Average Arab Oil                   | 15.7  | 16.2       | 16.9  | 18.4       | 20.2         | 21.6             | 23.0      | 24.3 | 25.6 | 26.9  | 26.9  |
| Real GDP                           |       |            |       |            | (Perc        | ent Chang        | e)        |      |      |       |       |
| World                              | 1.9   | 2.8        | 3.7   | 3.8        | 3.5          | 3.5              | 3.5       | 3,4  | 3.4  | 3.5   | 3.4   |
| Africa                             | 2.0   | 2.7        | 2.6   | 2.8        | 2.8          | 3.2              | 3.3       | 3.3  | 3.3  | 3.3   | 3.3   |
| Latin America                      | 2.7   | 3.4        | 4.9   | 5.2        | 4.7          | 4.4              | 4.5       | 4.6  | 4.6  | 4.6   | 4.6   |
| Developing Asia                    | 7.8   | 7.5        | 7.1   | 7.0        | 6.8          | 6.6              | 6.6       | 6.5  | 6.4  | 6.4   | 6.4   |
| Western Europe                     | 2.3   | 3.0        | 2.9   | 2.7        | 2.7          | 2.7              | 2.6       | 2.7  | 2.7  | 2.7   | 2.7   |
| Eastern Europe                     | 1.4   | 3.0        | 3.9   | 4.6        | 4.7          | 4.4              | 4.1       | 4.0  | 4.0  | 4.0   | 4.0   |
| Former Soviet Union                | -20.3 | -16.0      | -5.3  | -0.7       | 1.9          | 4.8              | 5.5       | 5.2  | 5.1  | 5.3   | 5.2   |
| China                              | 11.0  | 9.6        | 8.6   | 8.2        | 7.8          | 7.3              | 7.2       | 7.0  | 6.7  | 7.0   | 6.9   |
| Local Currency per U.S. Dollar     |       |            |       |            |              |                  |           |      |      |       |       |
| Argentina (Real)                   | 3.8   | 5.6        | 6.0   | 5.5        | 5.6          | 6.5              | 5.9       | 5.9  | 5.9  | 5.9   | 5.9   |
| Brazil (Real)                      | 3.9   | 3.5        | 6.3   | 6.4        | 5.5          | 4.9              | 4.9       | 4.9  | 4.9  | 4.9   | 4.9   |
| Canada                             | 2.5   | 5.4        | 5.4   | 4.2        | 4.2          | 3.8              | 3.5       | 2.8  | 2.5  | 2.9   | 2.7   |
| Australia                          | 4.7   | 4.0        | 3.7   | 2.6        | 2.3          | 2.5              | 2.6       | 2.8  | 2.7  | 2.7   | 2.7   |
| Inaliand                           | 8.3   | 8.3        | 8.2   | 8.1        | 8.0          | 7.9              | 7.7       | 7.6  | 7.6  | 7.6   | 7.6   |
| Japan<br>Furana an Uniar           | 0.7   | 2.5        | 3.0   | 2.9        | 2.3          | 2.4              | 2.3       | 2.3  | 2.2  | 2.3   | 2.3   |
| European Union                     | 2.0   | 2.8        | 2.8   | 2.9        | 2.6          | 2.3              | 2.3       | 2.3  | 2.2  | 2.3   | 2.3   |
| South Korea                        | 8.U   | 0./<br>7 A | 7.0   | 6.9<br>7 0 | 6.7          | 6.7              | 6.9       | 6.9  | 6.9  | 6,9   | 6.9   |
| laiwall                            | 6.3   | 7.4        | 1.3   | 7.2        | 0.9          | b. <i>1</i>      | 0.0       | 6.5  | 0.5  | 6.5   | 6.5   |

### **Domestic and Foreign Economic Projections**

\* The source for U.S. projections is The WEFA Group, December 1994. \*\* The source for foreign projections is Project LINK, November 1994.

# **U.S. and World Policy Assumptions**

- FAPRI projections incorporate provisions of the Food, Agriculture, Conservation, and Trade Act of 1990 (FACTA-90) and the Omnibus Budget Reconciliation Acts of 1990 and 1993 (OBRA-90, OBRA-93). Provisions of the three acts are assumed to be extended indefinitely. The projections incorporate both the North American Free Trade Agreement (NAFTA) and the General Agreement on Tariffs and Trade (GATT).
- FACTA-90 mandates a freeze in **target prices** for grains and cotton and in **loan rates** for sugarcane and sugar beets. Loan rates for feed grains, food grains, and cotton are calculated according to the formulas set forth in FACTA-90. Contrary to previous baselines, it is assumed that the Secretary does not use any discretionary authority to reduce loan rates based upon export competitiveness.
- Annual Acreage Reduction Programs (ARPs) are assumed to be managed in these projections with a specific focus on achieving stable domestic prices and continued competitiveness for U.S. commodities in the world markets.
- The Conservation Reserve Program (CRP) is continued in the current FAPRI projections, with some contracts allowed to expire and some re-enrolled. Following the assumptions of the CBO, 15 million acres were assumed to be extended through the year 2000/01. These acres, along with the 1.6 million acres assumed to be enrolled in 1996/97 and the 1.3 million acres extended after 2001/02, reach a total of 17.7 million acres in 2003/04. Under the 1993 Budget Reconciliation Package (OBRA-93), enrollment in the CRP is capped at 38 million acres.
- As mandated by FACTA-90, sugar marketing quotas are assumed to be triggered in fiscal years when sugar imports (other than sugar imported for polyhydric alcohol production or to be refined for re-export) fall below 1.25 million tons. After 1994, marketing quotas are not triggered in the FAPRI projections.
- FACTA-90 specifies that the **milk support price** cannot be reduced below the 1990 level of \$10.10 per cwt. The support price remains at this minimum level throughout the projection period since government purchases do not fall below the minimum level that triggers a support price increase. The minimum level is 3.5 billion pounds of milk equivalent, as measured on a total milk solids basis, plus an adjustment for increased imports of dairy products. Milk assessments drop to 10 cents per cwt after 1995 as legislated by OBRA-93.
- Implementation of CAP reform in the European Union began in 1993 and is projected to be completed in 1995. Adjustments in policy prices for many commodities have been taking place with compensatory payments being made to offset negative impacts on producer's incomes. The Blair House oilseeds agreement is also imposed on this baseline. The GATT agreement has impacts mainly on imports and exports of agricultural products. Set-aside rates for the European Union have been reduced to 12 percent (before exemption for small producers) for 1995/96 only.
- Support prices in Japan are assumed to be frozen indefinitely at current levels as Japan is expected to be in compliance with GATT AMS reduction requirements. Market access is implemented as per GATT commitments, but no tariffication of rice trade barriers is implemented. Continued tariff equivalent reduction of beef is in place.
- In the **former Soviet Union**, the transformation to market economies is assumed to continue. Credit availability is assumed to be adequate. Policies are assumed to be successful in avoiding a complete breakdown of the production and distribution systems. However, only modest improvements in reducing waste and increasing efficiency are assumed. Price liberalization, especially in Russia, is assumed to proceed over the next several years.
- The Republic of South Africa has begun privatizing its wheat import policy, allowing mills to import directly. Mills no longer have to wait before supplies of domestically-grown low-quality wheat are exhausted.
- The combination of lower grain prices from PROCAMPO in **Mexico** and freer access by the U.S. to the Mexican corn market under NAFTA is providing significant import opportunities for U.S. corn.

|                          | 1994  | 1995  | 1996  | 1997     | 1998        | 1999          | 2000         | 2001  | 2002  | 2003  | 2004  |
|--------------------------|-------|-------|-------|----------|-------------|---------------|--------------|-------|-------|-------|-------|
| Torget Drives            |       |       |       |          | (D-II-      |               |              |       | · .   |       |       |
| Target Prices            | 0.75  | 0.75  | 0.75  | 0.75     | (Dolla      | rs per Busi   | 1ei)<br>0.70 | 0.75  | 0.75  | 0.75  | 0.75  |
| Corn                     | 2.75  | 2.75  | 2.75  | 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  | 2.61  | 2.61  | 2.61  |
| Barley                   | 2.36  | 2.36  | 2.36  | 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  | 1.45  | 1.45  | 1.45  |
| Wheat                    | 4.00  | 4.00  | 4.00  | 4.00     | 4.00        | 4.00          | 4.00         | 4.00  | 4.00  | 4.00  | 4.00  |
| Rice (Dollars/cwt)       | 10.71 | 10.71 | 10.71 | 10.71    | 10.71       | 10.71         | 10.71        | 10.71 | 10.71 | 10.71 | 10.71 |
| Cotton (Dollars/lb)      | 0.73  | 0.73  | 0.73  | 0.73     | 0.73        | 0.73          | 0.73         | 0.73  | 0.73  | 0.73  | 0.73  |
| Loan Rates               |       |       |       |          |             |               |              |       |       |       |       |
| Corn                     | 1.89  | 1.83  | 1.84  | 1.80     | 1.80        | 1.78          | 1.80         | 1.80  | 1.80  | 1.82  | 1.85  |
| Sorghum                  | 1.80  | 1.74  | 1.75  | 1.71     | 1.71        | 1.69          | 1.71         | 1.71  | 1.71  | 1.73  | 1.76  |
| Barley                   | 1.54  | 1.49  | 1.50  | 1.47     | 1.47        | 1.45          | 1.46         | 1.46  | 1.46  | 1.48  | 1.50  |
| Oats                     | 0.97  | 0.94  | 0.95  | 0.93     | 0.93        | 0.92          | 0.92         | 0.92  | 0.92  | 0.94  | 0.95  |
| Sovbeans                 | 4.92  | 4.92  | 4.92  | 4.92     | 4.92        | 4.92          | 4.92         | 4.92  | 4.92  | 4.92  | 4.92  |
| Wheat                    | 2.58  | 2.56  | 2 65  | 2 65     | 2 62        | 2.56          | 2 50         | 2 50  | 2 55  | 2 65  | 274   |
| Rice (Dollars/cwt)       | 6 50  | 6 50  | 6 50  | 6 50     | 6 50        | 6 50          | 6 50         | 6 50  | 6 50  | 6.50  | 6.50  |
| Cotton (Dollars/lb)      | 0.50  | 0.52  | 0.51  | 0.52     | 0.53        | 0.53          | 0.52         | 0.51  | 0.51  | 0.51  | 0.51  |
| Sugarcane (Cents/lb)     | 18.00 | 18.00 | 18.00 | 18.00    | 18.00       | 18.00         | 18.00        | 18.00 | 18.00 | 18.00 | 18.00 |
| Acreage Reduction        |       |       |       |          |             |               |              |       |       |       |       |
| Program (ARP) Rate       |       |       |       |          | . (         | Percent)      |              |       |       |       |       |
| Corn                     | 0.0   | 7.5   | 5.0   | 5.0      | 5.0         | 5.0           | 2.5          | 2.5   | 0.0   | 0.0   | 0.0   |
| Sorahum                  | 0.0   | 0.0   | 0.0   | 0.0      | 0.0         | 0.0           | 0.0          | 0.0   | 0.0   | 0.0   | 0.0   |
| Barley                   | 0.0   | 0.0   | 0.0   | 0.0      | 0.0         | 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   | 0.0   | 0.0   | 0.0   |
| Wheat                    | 0.0   | 0.0   | 0.0   | 0.0      | 0.0         | 0.0           | 0.0          | 0.0   | 0.0   | 0.0   | 0.0   |
| Rice                     | 0.0   | 5.0   | 0.0   | 0.0      | 0.0         | 0.0           | 0.0          | 0.0   | 0.0   | 0.0   | 0.0   |
| Cotton                   | 11.0  | 0.0   | 0.0   | 5.0      | 10.0        | 10.0          | 10.0         | 10.0  | 10.0  | 10.0  | 10.0  |
|                          |       |       |       |          |             |               |              |       |       |       |       |
|                          |       |       | 45.0  | 45.0     | (           | Percent)      | 45.0         | 15.0  | 15.0  | 45.0  | 45.0  |
| Normal Flexed Area Rate  | 15.0  | 15.0  | 15.0  | 15.0     | 15.0        | 15.0          | 15.0         | 15.0  | 15.0  | 15.0  | 15.0  |
| Other Idled Area         |       |       |       |          | (Mi         | llion Acres)  | )            |       |       | 1 - A |       |
| Conservation Reserve     | 36.42 | 36.42 | 38.00 | 29.68    | 24.63       | 21.40         | 19.08        | 18.81 | 18.25 | 17.66 | 17.66 |
| 0-92/85, 50-92/85        | 12,86 | 13.86 | 13.09 | 13.85    | 15.28       | 15.34         | 15.56        | 15.27 | 15.06 | 15.21 | 14.81 |
|                          | 1994  | 1995  | 1996  | 1997     | 1998        | 1999          | 2000         | 2001  | 2002  | 2003  | 2004  |
|                          |       |       |       |          |             |               |              |       |       |       |       |
| Export Program           |       |       |       |          | (Million Do | ollars, Fisca | al Year)     |       |       |       |       |
| Expenditures *           | 945   | 860   | 810   | 753      | 662         | 569           | 473          | 409   | 408   | 409   | 409   |
|                          |       |       |       | (Dollars | per Hundr   | edweight,     | Calendar \   | Year) |       | 10.15 |       |
| Milk Support Price       | 10.10 | 10.10 | 10.10 | 10.10    | 10.10       | 10.10         | 10.10        | 10.10 | 10.10 | 10.10 | 10,10 |
| Producer Milk Assessment | 0.11  | 0.11  | 0.10  | 0.10     | 0.10        | 0.10          | 0.10         | 0.10  | 0.10  | 0.10  | 0.10  |
|                          |       |       |       |          |             |               |              |       |       |       |       |

### **U.S. Program Provisions**

\* Includes Export Enhancement and Market Promotion Program.

|                             | 93/94 | 94/95 | 95/96 | 96/97 | 97/98      | 98/99                | 99/00  | 00/01 | 01/02 | 02/03 | 03/04 |
|-----------------------------|-------|-------|-------|-------|------------|----------------------|--------|-------|-------|-------|-------|
| European Union              |       |       |       |       |            |                      |        |       |       |       | · ·   |
| Policy Prices               |       |       |       |       | (ECUs p    | ber Metric           | Ton)   |       |       |       |       |
| Cereal Intervention         | 115   | 107   | 99    | 99    | 99         | 99                   | 99     | 99    | 99    | . 99  | -99   |
| Rice Intervention           | 310   | 310   | 310   | 310   | 310        | 310                  | 310    | 310   | 310   | 310   | 310   |
| Oilseed Reference Price     | 163   | 193   | 193   | 193   | 193        | 193 🕚                | 193    | 193   | 193   | 193   | 193   |
| White Sugar Intervention    | 523   | 523   | 523   | 523   | 523        | 523                  | 523    | 523   | 523   | 523   | 523   |
| Raw Sugar Intervention      | 434   | 434   | 434   | 434   | 434        | 434                  | 434    | 434   | 434   | 434   | 434   |
| A Beet Minimum              | 39    | 39    | 39    | 39    | 39         | 39                   | 39     | 39    | 39    | 39    | 39    |
| B Beet Minimum              | 27    | 27    | 27    | 27    | 27         | 27                   | 27     | 27    | 27    | 27    | . 27  |
| Grains Compensatory Payment | 25    | 35    | 45    | 45    | 45         | 45                   | 45     | 45    | 45    | 45    | . 45  |
| Production Aid              |       |       |       |       | (Ecula     | nor Hosta            | ro)    |       |       |       |       |
| Oileoods                    | 350   | 350   | 350   | 350   | 350        | 350                  | 350    | 350   | 350   | 350   | 350   |
| Durum Whoat                 | 270   | 270   | 270   | 270   | 270        | 270                  | 270    | 270   | 270   | 270   | 270   |
|                             | 213   | 213   | 215   | 213   | 215        | 215                  | 215    | 213   | 213   | 213   | 210   |
|                             |       |       |       |       | (1.00      | 0 Hectares           | 2)     |       |       |       |       |
| Oilseed Base Area           |       | 5,499 | 5,128 | 5,128 | 5,128      | 5,128                | 5,128  | 5,128 | 5,128 | 5,128 | 5,128 |
|                             |       |       |       |       |            |                      |        |       |       |       |       |
| Set-aside Rate              |       |       |       |       | (F         | <sup>p</sup> ercent) |        |       |       |       |       |
| Grains, Protein Crops \*    | 15    | 15    | 12    | 15    | 15         | 15                   | 15     | 15    | 15    | 15    | 15    |
| Oilseeds \**                | 15    | 10    | 10    | 10    | 10         | 10                   | 10     | 10    | 10    | 10    | 10    |
|                             |       |       |       |       |            |                      |        |       |       |       |       |
| Japan                       |       |       |       |       |            |                      |        |       |       |       |       |
| Policy Prices               |       |       |       |       | (1,000 Yei | n per Metri          | c Ton) |       |       |       | 4     |
| Rice Purchase               | 273   | 273   | 273   | 273   | 273        | 273                  | 273    | 273   | 273   | 273   | 273   |
| Rice Resale                 | 299   | 299   | 299   | 299   | 299        | 299                  | 299    | 299   | 299   | 299   | 299   |
| Wheat Purchase              | 152   | 152   | 152   | 152   | 152        | 152                  | 152    | 152   | 152   | 152   | 152   |
| Wheat Resale                | 51    | 51    | 51    | 51    | 51         | 51                   | 51     | 51    | 51    | 51    | 51    |
| Barley Purchase             | 131   | 131   | 131   | 131   | 131        | 131                  | 131    | 131   | 131   | 131   | 131   |
| Barley Resale               | 45    | 45    | 45    | 45    | 45         | 45                   | 45     | 45    | 45    | 45    | 45    |

**Foreign Agricultural Policy Assumptions** 

|                     | 1994  | 1995  | 1996  | 1997  | 1998     | 1999       | 2000  | 2001  | 2002  | 2003  | 2004  |
|---------------------|-------|-------|-------|-------|----------|------------|-------|-------|-------|-------|-------|
| European Union      |       |       |       |       |          |            |       |       |       |       |       |
| Policy Prices       |       | -     |       |       | (ECUs p  | per Metric | Ton)  |       |       |       |       |
| Beef Intervention   | 3,087 | 2,916 | 2,916 | 2,916 | 2,916    | 2,916      | 2,916 | 2,916 | 2,916 | 2,916 | 2,916 |
| Pork Basic          | 1,300 | 1,300 | 1,300 | 1,300 | 1,300    | 1,300      | 1,300 | 1,300 | 1,300 | 1,300 | 1,300 |
| Milk Target         | 257   | 257   | 257   | 257   | 257      | 257        | 257   | 257   | 257   | 257   | 257   |
|                     |       |       |       |       | (Million | Metric To  | ns)   |       |       |       |       |
| Milk Delivery Quota | 107.3 | 107.3 | 107.3 | 107.3 | 107.3    | 107.3      | 107.3 | 107.3 | 107.3 | 107.3 | 107.3 |
| lanan               |       |       |       |       |          |            |       |       |       |       |       |
| Japan               |       |       |       |       | /[       | Dorcont)   |       |       |       |       |       |
| Beef Import Tariff  | 50    | 48    | 46    | 45    | 43       | 41         | 39    | 39    | 39    | 39    | 39    |

# Foreign Agricultural Policy Assumptions (continued)

\* Average set-aside prior to exemption for small producers. \*\* Same as \\* for 1993-94, 10 percent flat rate thereafter.

|                            | 93/94 | 94/95 | 95/96 | 96/97        | 97/98       | 98/99      | 99/00     | 00/01 | 01/02 | 02/03 | 03/04 |
|----------------------------|-------|-------|-------|--------------|-------------|------------|-----------|-------|-------|-------|-------|
| Wheat                      |       |       |       | (U.S. Do     | llars per M | etric Ton, | Marketing | Year) |       |       |       |
| EU Intervention            | 164   | 148   | 132   | <b>`</b> 131 | 134         | 136        | 137       | 138   | 139   | 141   | 142   |
| Japanese Purchase          | 1,414 | 1,421 | 1,341 | 1,319        | 1,347       | 1,374      | 1,401     | 1,429 | 1,458 | 1,488 | 1,518 |
| U.S. Target                | 147   | 147   | 147   | 147          | 147         | 147        | 147       | 147   | 147   | 147   | 147   |
| FOB U.S. Gulf              | 144   | 156   | 150   | 141          | 135         | 136        | 142       | 150   | 152   | 155   | 160   |
| Canadian Thunder Bay       | 131   | 147   | 140   | 131          | 126         | 131        | 141       | 153   | 156   | 160   | 166   |
| Australian Wheat Board     | 111   | 125   | 119   | 111          | 108         | 112        | 121       | 131   | 134   | 137   | 142   |
| Barley                     |       |       |       |              |             |            |           |       |       | * _   |       |
| EU Intervention            | 164   | 148   | 132   | 131          | 134         | 136        | 137       | 138   | 139   | 141   | 142   |
| Japanese Purchase          | 1,218 | 1,224 | 1,155 | 1,136        | 1,160       | 1,184      | 1,207     | 1,231 | 1,256 | 1,282 | 1,308 |
| U.S. Target                | 108   | 108   | 108   | 108          | 108         | 108        | 108       | 108   | 108   | 108   | 108   |
| FOB U.S. Pacific Northwest | 116   | 117   | 126   | 125          | 118         | 118        | 118       | 119   | 121   | 122   | 125   |
| Corn                       |       |       |       |              |             |            |           |       |       |       |       |
| EU Intervention            | 164   | 146   | 131   | 132          | 134         | 136        | 137       | 138   | 140   | 141   | 142   |
| U.S. Target                | 108   | 108   | 108   | 108          | 108         | 108        | 108       | 108   | 108   | 108   | 108   |
| FOB U.S. Gulf              | 117   | 98    | 105   | 102          | 96          | 101        | 101       | 102   | 105 🕓 | 104   | 108   |
| Rice                       |       |       |       |              |             |            |           |       |       |       |       |
| Japanese Purchase          | 2,544 | 2,556 | 2,413 | 2,373        | 2,423       | 2,472      | 2,520     | 2,572 | 2,624 | 2,678 | 2,732 |
| U.S. Target (rough)        | 236   | 236   | 236   | 236          | 236         | 236        | 236       | 236   | 236   | 236   | 236   |
| FOB Bangkok 100B NPQ       | 294   | 267   | 269   | 270          | 273         | 280        | 284       | 292   | 294   | 300   | 310   |
| Rapeseed                   |       |       |       |              |             |            |           |       |       |       |       |
| EU Reference               | 308   | 298   | 300   | 298          | 286         | 280        | 277       | 277   | 277   | 277   | 276   |
| Cash Vancouver             | 300   | 240   | 235   | 248          | 245         | 236        | 248       | 247   | 257   | 268   | 267   |
| Sovbeans                   |       |       |       |              |             |            |           |       |       |       |       |
| EU Reference               | 308   | 298   | 300   | 298          | 286         | 280        | 277       | 277   | 277   | 277   | 276   |
| U.S. Loan Rate             | 184   | 181   | 181   | 181          | 181         | 181        | 181       | 181   | 181   | 181   | 181   |
| FOB U.S. Gulf              | 253   | 214   | 219   | 226          | 224         | 223        | 225       | 229   | 234   | 240   | 243   |
| Cotton                     |       |       |       |              |             |            |           |       |       |       |       |
| U.S. Target                | 1,287 | 1,488 | 1,407 | 1,376        | 1,351       | 1,316      | 1,303     | 1,292 | 1,354 | 1,323 | 1,358 |
| Cotlook A Index            | 1,558 | 1,802 | 1,741 | 1,680        | 1,649       | 1,603      | 1,586     | 1,572 | 1,651 | 1,612 | 1,657 |
|                            |       |       |       |              |             |            |           |       |       |       |       |

# **Policy Prices and World Prices**

|                             |        |        |         |        |             | ÷          |           |        |        |        |        |
|-----------------------------|--------|--------|---------|--------|-------------|------------|-----------|--------|--------|--------|--------|
|                             | 1994   | 1995   | 1996    | 1997   | 1998        | 1999       | 2000      | 2001   | 2002   | 2003   | 2004   |
| Beef                        |        |        |         |        | (U.S. Dolla | ars per Me | tric Ton) |        |        |        |        |
| EU Intervention             | 4,379  | 3,944  | 3,837   | 3,923  | 3,987       | 4,023      | 4,059     | 4,096  | 4,133  | 4,171  | 4,209  |
| Japanese Wholesale          |        |        |         |        |             |            |           |        |        |        |        |
| Dairy and Import            | 6,008  | 4,547  | 4,120   | 4,572  | 4,633       | 4,791      | 4,990     | 5,271  | 5,402  | 5,502  | 5,408  |
| Wagyu                       | 17,968 | 16,151 | 15,602  | 16,747 | 17,861      | 18,882     | 19,544    | 19,870 | 20,000 | 20,369 | 20,486 |
| Nebraska Direct             |        | ,      |         |        |             |            |           |        |        |        |        |
| Fed Steer Price             | 1.517  | 1.479  | 1,430   | 1,356  | 1.392       | 1,473      | 1,601     | 1,723  | 1,787  | 1,837  | 1,773  |
| U.S. Retail                 | 6,237  | 6,141  | 6,082   | 5,944  | 5,974       | 6,080      | 6,312     | 6,512  | 6,613  | 6,647  | 6,587  |
| Pork                        |        |        |         | 5      |             |            |           |        |        |        |        |
| EU Basic                    | 1 524  | 1 454  | 1 414   | 1 445  | 1 469       | 1 482      | 1 496     | 1 509  | 1 523  | 1 537  | 1.551  |
| Jananese Wholesale          | 5 135  | 4 930  | 4 951   | 5.077  | 5 183       | 5 272      | 5 352     | 5 439  | 5 527  | 5 634  | 5 746  |
| US Barrows Gilts            | 884    | 002    | 080     | 0,077  | 855         | 0,212      | 1 037     | 1 032  | 961    | 1 004  | 1 087  |
| U.S. Battows, Onto          | 4 371  | 1 387  | 4 568   | 4 536  | 4 463       | 4 607      | 1 873     | 1,002  | 1 607  | 1,004  | 5 004  |
|                             | 4,071  | 4,507  | , 4,500 | 4,550  | 4,400       | 4,007      | 4,075     | 4,043  | 4,037  | 4,731  | 5,004  |
| Broilers                    |        |        |         |        |             |            |           |        |        |        |        |
| EU Producer                 | 1,602  | 1,648  | 1,831   | 1,832  | 1,997       | 1,967      | 1,891     | 1,899  | 1,828  | 1,789  | 1,798  |
| Japanese Retail             | 9,950  | 8,452  | 8,532   | 9,008  | 9,155       | 9,213      | 9,369     | 9,548  | 9,650  | 9,781  | 9,951  |
| U.S. 12-City Wholesale      | 1,228  | 1,165  | 1,199   | 1,225  | 1,199       | 1,212      | 1,252     | 1,273  | 1,261  | 1,268  | 1,291  |
| U.S. Retail                 | 1,987  | 1,902  | 1,917   | 1,914  | 1,895       | 1,934      | 2,010     | 2,064  | 2,039  | 2,066  | 2,127  |
| Butter                      |        |        |         |        |             |            |           |        |        |        |        |
| EU Intervention             | 3 261  | 3 110  | 3 026   | 3 093  | 3 144       | 3 172      | 3 200     | 3 230  | 3 259  | 3,288  | 3.318  |
| U.S. CCC Purchase           | 1 433  | 1 433  | 1 433   | 1 433  | 1 433       | 1 433      | 1 433     | 1 433  | 1 433  | 1 433  | 1 433  |
| U.S. Wholesale              | 1 479  | 1 477  | 1 437   | 1,100  | 1 443       | 1 459      | 1 464     | 1 462  | 1 466  | 1 450  | 1 445  |
| EOB Northern Europe         | 1 440  | 1 5/1  | 1 5/3   | 1 544  | 1 537       | 1,400      | 1 531     | 1 528  | 1,400  | 1,523  | 1 520  |
| Canadian Support            | 3,915  | 4,011  | 4,037   | 3,952  | 3,812       | 3,632      | 3,529     | 3,512  | 3,503  | 3,505  | 3,515  |
| Nonfot Dry Milk             |        |        |         |        |             |            |           |        |        |        |        |
|                             | 1 005  | 1 561  | 1 500   | 1 496  | 4 466       | 1 411      | 1 267     | 1 270  | 1 202  | 1 405  | 1 117  |
|                             | 1,995  | 2,001  | 0.000   | 2,400  | 1,400       | 2,200      | 2 200     | 1,379  | 1,082  | 2,200  | 2 200  |
| U.S. CCC Fulchase           | 2,200  | 2,200  | 2,200   | 2,200  | 2,200       | 2,200      | 2,200     | 2,200  | 2,200  | 2,200  | 2,200  |
| C.S. Wholesale              | 2,303  | 2,340  | 2,000   | 2,310  | 2,310       | 2,002      | 2,344     | 2,301  | 2,307  | 2,001  | 1 201  |
| Consider Support            | 1,009  | 1,574  | 1,041   | 1,510  | 1,402       | 1,402      | 1,404     | 1,400  | 1,429  | 1,390  | 1,004  |
| Canadian Support            | 2,620  | 2,699  | 2,815   | 2,929  | 3,057       | 3,218      | 3,333     | 3,371  | 3,403  | 3,420  | 3,444  |
| Cheese                      |        |        |         |        |             |            |           |        |        |        |        |
| EU Threshold                | 3,881  | 3.655  | 3.556   | 3.635  | 3.545       | 3.548      | 3.529     | 3.480  | 3.616  | 3.571  | 3.603  |
| U.S. CCC Purchase           | 2,470  | 2.470  | 2.470   | 2.470  | 2,470       | 2.470      | 2.470     | 2.470  | 2,470  | 2.470  | 2.470  |
| U.S. Wholesale              | 2 919  | 2 889  | 2,902   | 2,900  | 2,907       | 2,933      | 2,933     | 2,935  | 2,946  | 2 915  | 2 917  |
| FOB Northern Europe         | 1,830  | 1,812  | 1,809   | 1,816  | 1,851       | 1,877      | 1,898     | 1,926  | 1,917  | 1,931  | 1,940  |
|                             |        |        |         |        |             |            |           |        |        |        |        |
| VIIIK<br>ELL Torgot         | 004    | 007    | 070     | 005    | 000         | 000        | 005       | 000    | 204    | 000    | 000    |
|                             | 301    | 287    | 279     | 285    | 290         | 293        | 295       | 298    | 301    | 303    | 306    |
| U.S. Support                | 223    | 223    | 223     | 223    | 223         | 223        | 223       | 223    | 223    | 223    | 223    |
| U.S. Farm                   | 288    | 273    | 270     | 2/2    | 2/6         | 280        | 284       | 287    | 288    | 286    | 285    |
| Canadian Target, Industrial | 381    | 392    | 402     | 408    | 412         | 418        | 422       | 425    | 427    | 429    | 431    |
|                             |        |        |         |        |             |            |           |        |        |        |        |

Policy Prices and World Prices (continued)

# World Trade

- World Feed Grains
- World Soybeans
- World Soybean Meal
- World Soybean Oil
- World Rapeseed
- World Rapeseed Meal
- World Rapeseed Oil
- World Wheat
- World Rice
- World Cotton
- World Sugar
- World Livestock
- World Dairy

# **World Feed Grains**

- A 100 thousand ha increase in **Argentine** corn area combined with a slight increase in yield is expected to result in a 250 tmt increase in exports in 1994/95. Little area growth is expected for the remainder of the projection period, but moderate yield growth translates into a 1.6 mmt increase in exports by 2003/04.
- Severe drought in Australian barley producing regions has reduced the crop more than 4.4 mmt compared to 1993/94. After recovery from the drought, production is expected to increase with only slow yield growth, limiting export potential over the next ten years.
- **Canadian** barley area declined in 1994/95 as canola plantings increased dramatically. Barley area is projected to remain stable for the next ten years at 4.1 million ha and production increases only with yields. Export growth is expected to be very slow.
- Because of expanding poultry production in **Thailand**, corn feed demand is expected to increase faster than corn production. Consequently, exports are projected to decline, and Thailand becomes a net importer by the end of the century.
- Cereal area set-aside requirements in the European Union have resulted in a disproportionate reduction in barley area compared to other grains. Exports of barley are projected to decline to less than 4 mmt as stocks are reduced through 1998/99, and then begin to increase as GATT constraints on wheat exports cause a shift of land back into barley.
- The drought in **Eastern Europe** lasted into the 1994 growing season and feed-grain production was only 2.5 mmt above 1993/94 levels. Recovery is expected to occur in 1995/96 and production is projected to increase more than 8 mmt compared to 1994/95. Eastern Europe is projected to be a net importer of roughly 2 mmt by 2003/04.
- It appears that, along with other changes, the macroeconomic engine driving **Chinese** feed-grain demand shifted gears in 1994/95, leading to an expected 7 mmt increase in domestic use of feed grains. Although production in 1994/95 was 1 mmt higher than in 1993/94, China is expected to be barely self-sufficient in feed grains, compared to exports of more than 10 mmt last year.
- Although NAFTA and PROCAMPO have opened the Mexican market for feed grains and provided incentives for increased feeding of corn, the huge devaluation of the peso partially dampened import increases. As the Mexican economy stabilizes in the next few years, import growth is projected to accelerate.
- Feed demand is projected to be weak due to increasing beef imports and gradual declines in hog inventories in Japan. Even with growth in poultry production, feed-grain demand and imports are not projected to increase.
- Drought in some of the grain-producing regions of northern and western **Russia** resulted in smaller crops of feed grains, particularly corn and rye, in 1994/95. However, continuing declines in animal inventories are offsetting the small crop, and net imports are expected to fall to less than 2 mmt. No recovery in imports is projected for the next ten years.
- The productive potential of **Ukraine** and reduced domestic feed demand stemming from poor economic performance are projected to result in the Ukraine becoming a net exporter of nearly 3 mmt of feed grains by 2003/04.
- Asia (excluding China, Thailand, and Japan) is projected to increase feed-grain imports by nearly 5 mmt between 1994/95 and 2003/04. Land constraints should limit increases in production, while high-income growth should lead to increased demand for livestock products. The net result is stronger demand for imported feed grains. Countries such as **South Korea** and **Taiwan** are expected to account for a large proportion of this increase in imports, however environmental constraints could become an issue, particularly in Taiwan.

|                           | 93/94  | 94/95  | 95/96  | 96/97  | 97/98       | 98/99       | 99/00     | 00/01  | 01/02  | 02/03  | 03/04  |
|---------------------------|--------|--------|--------|--------|-------------|-------------|-----------|--------|--------|--------|--------|
| Net Exporters             |        |        |        |        |             |             |           |        |        |        |        |
|                           |        |        |        |        | (1,000      | ) Metric To | ons)      |        |        |        |        |
| Argentina                 | 5,400  | 5,662  | 5,859  | 6,312  | 6,619       | 6,787       | 6,999     | 7,079  | 7,087  | 7,176  | 7,232  |
| Australia                 | 3,581  | 320    | 1,859  | 2,330  | 2,561       | 2,686       | 2,732     | 2,684  | 2,611  | 2,554  | 2,536  |
| Canada                    | 5,039  | 4,560  | 4,905  | 4,842  | 4,928       | 5,070       | 5,127     | 5,165  | 5,228  | 5,240  | 5,294  |
| China                     | 10,300 | 300    | 2,801  | 2,543  | 2,251       | 1,932       | 1,584     | 1,204  | 784    | 323    | -186   |
| Eastern Europe            | -2,055 | -301   | 574    | 800    | 1,792       | 1,924       | 2,003     | 1,988  | 2,021  | 2,156  | 2,267  |
| European Union            | 6,958  | 3,650  | 3,760  | 3,402  | 2,091       | 1,606       | 2,018     | 2,387  | 2,770  | 3,531  | 3,531  |
| South Africa              | 4,485  | 1,005  | 1,154  | 1,222  | 1,110       | 1,154       | 1,114     | 1,101  | 1,115  | 1,058  | 1,071  |
| Thailand                  | -80    | 200    | 251    | 200    | 105         | 22          | -92       | -224   | -372   | -553   | -747   |
| Ukraine                   | 55     | 200    | 1,499  | 1,041  | 1,248       | 1,393       | 1,656     | 2,060  | 2,311  | 2,597  | 2,843  |
| Total Non-U.S.            | 33,681 | 15,597 | 22,662 | 22,691 | 22,704      | 22,573      | 23,143    | 23,445 | 23,554 | 24,081 | 23,840 |
| United States             | 37,183 | 53,705 | 51,305 | 50,452 | 51,702      | 53,217      | 54,277    | 56,091 | 58,035 | 60,288 | 63,108 |
| Trade Share               | 52.5%  | 77.5%  | 69.4%  | 69.0%  | 69.5%       | 70.2%       | 70.1%     | 70.5%  | 71.1%  | 71.5%  | 72.6%  |
| Total Net Exports         | 70,864 | 69,302 | 73,967 | 73,143 | 74,406      | 75,790      | 77,420    | 79,535 | 81,589 | 84,369 | 86,947 |
| Net Importers             |        |        |        |        |             |             |           |        |        |        |        |
| Israel                    | 1,148  | 1,502  | 1,633  | 1,616  | 1,606       | 1,628       | 1,626     | 1,623  | 1,632  | 1,624  | 1,627  |
| Japan                     | 20,845 | 20,777 | 20,805 | 20,790 | 20,807      | 20,811      | 20,802    | 20,782 | 20,713 | 20,643 | 20,568 |
| Russia                    | 3,700  | 1,800  | 2,582  | 1,774  | 1,277       | 1,059       | 678       | 501    | 485    | 647    | 510    |
| Other Former Soviet Union | 850    | 1,255  | 809    | 846    | 812         | 833         | 702       | 624    | 571    | 548    | 504    |
| Developing                | 40,248 | 46,282 | 47,148 | 46,924 | 48,450      | 49,988      | 51,981    | 54,205 | 56,289 | 58,848 | 61,448 |
| Algeria                   | 1,874  | 2,200  | 2,011  | 1,910  | 1,966       | 2,061       | 2,135     | 2,215  | 2,298  | 2,384  | 2,472  |
| Egypt                     | 1,949  | 2,207  | 2,095  | 2,205  | 2,331       | 2,488       | 2,646     | 2,818  | 3,003  | 3,201  | 3,412  |
| Other Africa              | 3,593  | 3,186  | 2,942  | 3,016  | 3,150       | 3,378       | 3,661     | 3,953  | 4,298  | 4,716  | 5,104  |
| Saudi Arabia              | 5,500  | 5,500  | 5,474  | 5,429  | 5,406       | 5,423       | 5,473     | 5,540  | 5,623  | 5,715  | 5,817  |
| Other Middle East         | 2,195  | 2,759  | 2,759  | 2,897  | 3,127       | 3,269       | 3,419     | 3,569  | 3,702  | 3,869  | 4,017  |
| Brazil                    | 1,183  | 1,675  | 2,633  | 1,693  | 1,545       | 1,422       | 1,503     | 1,687  | 1,957  | 2,302  | 2,765  |
| Mexico                    | 4,755  | 5,353  | 6,057  | 6,374  | 6,750       | 6,993       | 7,315     | 7,602  | 7,848  | 8,155  | 8,408  |
| Other Latin America       | 5,735  | 5,727  | 5,779  | 5,815  | 5,958       | 6,141       | 6,290     | 6,541  | 6,806  | 7,012  | 7,289  |
| Indonesia                 | 550    | 858    | 700    | 727    | 786         | 842         | 887       | 934    | 978    | 1,024  | 1,080  |
| Malaysia                  | 1,900  | 2,350  | 2,348  | 2,445  | 2,562       | 2,670       | 2,812     | 2,980  | 3,172  | 3,397  | 3,650  |
| Pakistan                  | 0      | 0      | 0      | 0      | 0           | 0           | 0         | 0      | 0      | 0      | 0      |
| South Korea               | 5,499  | 7,945  | 8,155  | 8,347  | 8,599       | 8,988       | 9,256     | 9,383  | 9,458  | 9,555  | 9,632  |
| Taiwan                    | 5,650  | 5,750  | 5,827  | 5,915  | 6,013       | 6,115       | 6,219     | 6,327  | 6,438  | 6,553  | 6,673  |
| Vietnam                   | -60    | -100   | -100   | -100   | -100        | -100        | -100      | -100   | -100   | -100   | -100   |
| Other Asia                | -75    | 872    | 467    | 251    | 357         | 299         | 464       | 754    | 808    | 1,063  | 1,228  |
| Rest of World             | 323    | 285    | -110   | 93     | 354         | 372         | 532       | 700    | 799    | 960    | 1,190  |
| Residual                  | 4,000  | -2,600 | 1,100  | 1,100  | 1,100       | 1,100       | 1,100     | 1,100  | 1,100  | 1,100  | 1,100  |
| Total Net Imports         | 71,114 | 69,302 | 73,967 | 73,143 | 74,406      | 75,790      | 77,420    | 79,535 | 81,589 | 84,369 | 86,947 |
| U.S. Corn Price           |        |        |        |        | (U.S. Dolla | ars per Me  | tric Ton) |        |        |        |        |
| FOB Gulf                  | 116.99 | 98.05  | 104.64 | 101.81 | 96.34       | 100.55      | 100.74    | 102.05 | 105.25 | 104.05 | 107.50 |
| U.S. Sorghum Price        |        |        |        |        |             |             |           |        |        |        |        |
| FOB Gulf                  | 109.24 | 96.35  | 105.49 | 101.56 | 94.60       | 98.71       | 99.32     | 100.90 | 104.81 | 104.74 | 108.30 |
| U.S. Barley Price         | 445 50 | 447 47 | 100.07 | 404.00 | 447.05      | 447 50      | 447.00    | 440.05 | 404.00 | 400 44 | 405 40 |
| FOD FACILIC NOTINWEST     | 110.53 | 117.17 | 120.07 | 124.92 | 117.65      | 117.59      | 117.89    | 118.65 | 121.22 | 122.41 | 125.40 |

Feed-Grain Trade

### **World Soybeans**

- Argentina is expected to continue expansion of soybean area over the projection period, although at a much more moderate rate than that of the past ten years. Crush is projected to expand by about 25 percent over the projection period to take advantage of strong world demand for soybean products. Soybean net exports are projected to increase from 3 mmt in 1994/95 to 3.8 mmt in 2003/04.
- Brazilian soybean net exports of 4.5 mmt in 1994/95 are projected to grow to 5 mmt by 2003/04. Slow growth in soybean exports for Brazil can be attributed to the combined effects of slow growth in area expansion, and strong crush demand for domestic consumption of oil and for exports of meal.
- **Canadian** soybean area has expanded by over 45 percent over the past two years, largely due to an attractive soybean price relative to corn. The increased production from the expanded area allowed nearly 900 tmt of soybean net exports in 1994/95. As significant area is expected to be switched back to other competing crops, net exports are projected to drop down to just over 500 tmt and are expected remain stable over the projection period.
- After several years of stable area in soybeans, **China** exploded with growth, expanding from 7.6 to 9.7 million ha in 1993/94. This area is projected to be maintained due to the attractive price of soybeans and soybean products. Most of this increase in area came at the expense of rice area. Despite the upsurge in production, income driven demand for meal and oil leaves only 500 tmt of soybean net exports in 1994/95. Although area expansion is projected to subside, crush is expected to continue robust growth, causing net exports of soybeans to fall off steadily over the projection period.
- Implementation of the Blair House oilseeds agreement constrains total area that can be planted to oilseeds in the **European Union** to 5.128 million ha beginning in 1995/96. Soybean net imports of about 14 mmt are expected to be maintained over the projection period to supply domestic crushing facilities.
- Japan, having little capacity to expand oilseed production, is expected to continue meeting its crush demand via imports. Japanese imports of soybeans are projected to increase from 4.8 mmt in 1994/95 to 5.2 mmt in 2003/04.
- South Korea and Taiwan are expected to slow their growth rate of soybean imports over the projection period due to limited growth in their livestock sectors. Net imports are projected to increase from 1.3 to 1.6 mmt for South Korea, and from 2.4 to 2.6 mmt for Taiwan.
- Soybean net imports are not expected to rebound significantly in the **republics of the former Soviet Union**, following the recent downward trends of the livestock industries and continued poor economic outlook.

|                           | 93/94               | 94/95  | 95/96  | 96/97  | 97/98       | 98/99       | 99/00    | 00/01  | 01/02        | 02/03  | 03/04  |
|---------------------------|---------------------|--------|--------|--------|-------------|-------------|----------|--------|--------------|--------|--------|
| Net Exporters             |                     |        |        |        |             |             |          | · · ·  |              |        |        |
|                           | (1,000 Metric Tons) |        |        |        |             |             |          |        |              |        |        |
| Argentina                 | 3,001               | 2,998  | 3,128  | 3,201  | 3,288       | 3,380       | 3,465    | 3,552  | 3,641        | 3,733  | 3,828  |
| Brazil                    | 4,152               | 4,452  | 4,679  | 4,794  | 4,881       | 4,916       | 4,921    | 4,921  | 4,943        | 4,984  | 5,022  |
| Canada                    | 550                 | 893    | 561    | 516    | 530         | 567         | 577      | 592    | 604          | 610    | 628    |
| China                     | 740                 | 348    | 407    | 428    | 435         | 515         | 520      | 471    | 373          | 355    | 356    |
| Paraguay                  | 1,100               | 1,200  | 1,230  | 1,266  | 1,301       | 1,331       | 1,359    | 1,389  | 1,421        | 1,454  | 1,483  |
| Total Non-U.S.            | 9,543               | 9,890  | 10,005 | 10,206 | 10,435      | 10,708      | 10,843   | 10,925 | 10,982       | 11,136 | 11,317 |
| United States             | 15,649              | 21,283 | 19,745 | 19,948 | 20,153      | 20,338      | 20,710   | 21,150 | 21,624       | 21,990 | 22,378 |
| Trade Share               | 62.1%               | 68.3%  | 66.4%  | 66.2%  | 65.9%       | 65.5%       | 65.6%    | 65.9%  | 66.3%        | 66.4%  | 66.4%  |
| Total Net Exports         | 25,192              | 31,173 | 29,750 | 30,154 | 30,588      | 31,046      | 31,553   | 32,075 | 32,606       | 33,126 | 33,694 |
| Net Importers             |                     |        |        |        |             |             |          |        |              |        |        |
| Eastern Europe            | 463                 | 458    | 438    | 399    | 399         | 429         | 465      | 494    | <b>521</b> . | 534    | 567    |
| European Union            | 12,795              | 14,528 | 13,767 | 13,905 | 13,997      | 14,070      | 14,156   | 14,248 | 14,345       | 14,431 | 14,520 |
| Former Soviet Union       | 385                 | 434    | 432    | 441    | 451         | 460         | 470      | 480    | 491          | 501    | 513    |
| Russian Republic          | 270                 | 275    | 281    | 289    | 296         | 300         | 304      | 308    | 312          | 315    | 318    |
| Ukraine                   | 30                  | 75     | 75     | 77     | 81          | 85          | 90       | 96     | 103          | 109    | 116    |
| Other Former Soviet Union | 85                  | 85     | 76     | 75     | 74          | 74          | 75       | 76     | 77           | 77     | 78     |
| Japan                     | 4,800               | 4,800  | 4,869  | 4,916  | 4,964       | 5,017       | 5,065    | 5,114  | 5,162        | 5,207  | 5,252  |
| Developing                | 5,638               | 6,128  | 6,202  | 6,248  | 6,307       | 6,368       | 6,436    | 6,490  | 6,553        | 6,623  | 6,700  |
| India                     | 0                   | 0      | 0      | 0      | · 0         | . 0         | 0        | 0      | 0            | 0      | 0      |
| Mexico                    | 2,138               | 2,404  | 2,461  | 2,435  | 2,449       | 2,461       | 2,472    | 2,479  | 2,483        | 2,487  | 2,488  |
| South Korea               | 1,200               | 1,325  | 1,372  | 1,432  | 1,462       | 1,488       | 1,517    | 1,531  | 1,552        | 1,576  | 1,606  |
| Taiwan                    | 2,300               | 2,399  | 2,369  | 2,382  | 2,397       | 2,419       | 2,447    | 2,480  | 2,518        | 2,560  | 2,606  |
| Rest of World             | 3,400               | 3,635  | 3,842  | 4,044  | 4,271       | 4,503       | 4,762    | 5,049  | 5,334        | 5,630  | 5,943  |
| Residual                  | -2,289              | 1,190  | 200    | 200    | 200         | 200         | 200      | 200    | 200          | 200    | 200    |
| Total Net Imports         | 25,192              | 31,173 | 29,750 | 30,154 | 30,588      | 31,046      | 31,553   | 32,075 | 32,606       | 33,126 | 33,694 |
| U.S. Export Price         |                     |        |        |        | (U.S. Dolla | ars per Met | ric Ton) |        |              |        |        |
| FOB Gulf                  | 253.23              | 213.57 | 218.53 | 225.65 | 224.05      | 222.68      | 225.48   | 228.54 | 233.79       | 240.19 | 242.74 |

Soybean Trade

### World Soybean Meal

- Soybean meal production is projected to increase by 22 percent over the projection period in **Argentina**, as soybean area and crush capacity continue to expand. Currently only about 2 percent of Argentina's meal production is consumed domestically. As this situation is not expected to change significantly, meal net exports are projected to increase from 6.9 mmt in 1994/95 to 8.2 mmt in 2003/04.
- Strong growth in **Brazil's** poultry industry continues to drive soybean meal consumption. Soybean meal domestic use is projected to grow from 4.2 mmt in 1994/95 to 5.5 mmt in 2003/04, limiting growth of net exports to less than 1 mmt over the same period.
- Despite recent area expansion of soybeans in **Canada**, crush of soybeans has not increased. Domestic use of soymeal is projected to increase only slightly over the projection period, leaving Canada as a net importer of 654 tmt by 2003/04.
- The European Union, responding to favorable soymeal prices, is expected to have net imports of 10.7 mmt in 1994/95, an increase of over 200 tmt from the previous year. The EU is expected to continue to increase meal imports over the projection period as livestock production increases, ending with 11.6 mmt of net imports by 2003/04.
- Heavy rains at planting time decreased soybean area in **India** in 1994/95, dropping production by nearly 20 percent. India crushes soybeans primarily for the oil, with nearly all of the meal being exported. India is expected to export 1.9 mmt of soymeal in 1994/95, and is projected to increase exports to 2.3 mmt by the end of the projection period.
- Soybean meal net imports are not projected to grow significantly in **Taiwan**. Growth in domestic consumption of soybean meal is expected to be limited partly in response to environmental restrictions associated with their pork industry.
- The **republics of the former Soviet Union** are not expected to increase net imports of soymeal over the projection period. Projected economic recovery is not expected to ignite incomes or livestock production to the extent that major imports of animal feeds would be necessary.
- Japanese imports of soymeal are projected to begin falling off slightly toward the end of the projection period. Continued increased crush of both soybeans and canola will increase Japan's self-sufficiency in protein meal, while increased meat imports due to GATT commitments are expected to limit growth for domestic livestock production.

|                           | 93/94                         | 94/95  | 95/96  | 96/97  | 97/98  | 98/99  | 99/00  | 00/01  | 01/02  | 02/03  | 03/04  |
|---------------------------|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Net Exporters             |                               |        |        |        |        |        |        |        |        |        |        |
|                           | (1,000 Metric Tons)           |        |        |        |        |        |        |        |        |        |        |
| Argentina                 | 6,734                         | 6,911  | 6,969  | 7,101  | 7,251  | 7,406  | 7,556  | 7,706  | 7,858  | 8,013  | 8,171  |
| Brazil                    | 10,643                        | 9,745  | 9,836  | 9,902  | 10,021 | 10,163 | 10,333 | 10,514 | 10,673 | 10,833 | 10,997 |
| China                     | 700                           | 500    | 337    | 299    | 237    | 191    | 146    | 129    | 129    | 93     | 51     |
| India                     | 2,260                         | 1,992  | 2,166  | 2,191  | 2,209  | 2,226  | 2,251  | 2,275  | 2,295  | 2,307  | 2,321  |
| Paraguay                  | 375                           | 375    | 389    | 407    | 426    | 446    | 461    | 476    | . 490  | 503    | 521    |
| Total Non-U.S.            | 20,712                        | 19,522 | 19,697 | 19,899 | 20,143 | 20,432 | 20,747 | 21,099 | 21,445 | 21,749 | 22,061 |
| United States             | 4,817                         | 5,230  | 4,473  | 4,508  | 4,765  | 4,955  | 5,081  | 5,096  | 5,197  | 5,396  | 5,630  |
| Trade Share               | 18.9%                         | 21.1%  | 18.5%  | 18.5%  | 19.1%  | 19.5%  | 19.7%  | 19.5%  | 19.5%  | 19.9%  | 20.3%  |
| Total Net Exports         | 25,529                        | 24,752 | 24,169 | 24,407 | 24,908 | 25,387 | 25,828 | 26,195 | 26,642 | 27,145 | 27,691 |
| Net Importers             |                               |        |        | •      |        |        |        |        |        |        |        |
| Canada                    | 595                           | 570    | 597    | 596    | 603    | 625    | 651    | 626    | 617    | 619    | 654    |
| Eastern Europe            | 1,580                         | 1,780  | 1.875  | 1.900  | 1.914  | 1.926  | 1.951  | 1.991  | 2.034  | 2.069  | 2.099  |
| European Union            | 10,538                        | 10.772 | 10.252 | 10,305 | 10.554 | 10,733 | 10.893 | 11.028 | 11.206 | 11.416 | 11.632 |
| Former Soviet Union       | 1,407                         | 1,241  | 1,182  | 1,165  | 1,139  | 1,150  | 1,130  | 1,089  | 1,060  | 1,024  | 995    |
| Russian Republic          | 816                           | 700    | 687    | 668    | 654    | 667    | 645    | 622    | 602    | 580    | 560    |
| Ukraine                   | 301                           | 251    | 245    | 245    | 238    | 236    | 233    | 220    | 213    | 203    | 196    |
| Other Former Soviet Union | 290                           | 290    | 251    | 252    | 247    | 247    | 252    | 247    | 245    | 241    | 240    |
| Japan                     | 873                           | 848    | 870    | 861    | 850    | 835    | 823    | 808    | 800    | 794    | 789    |
| Developing                | 1,401                         | 1,380  | 1,360  | 1,401  | 1,506  | 1,621  | 1,741  | 1,867  | 1,997  | 2,138  | 2,234  |
| Mexico                    | 371                           | 458    | 446    | 448    | 488    | 532    | 581    | 637    | 699    | 765    | 792    |
| South Korea               | 750                           | 702    | 712    | 747    | 794    | 853    | 916    | 980    | 1,044  | 1,114  | 1,180  |
| Taiwan                    | 280                           | 221    | 202    | 206    | 223    | 235    | 244    | 250    | 254    | 259    | 262    |
| Rest of World             | 7,379                         | 7,960  | 7,833  | 7,979  | 8,143  | 8,298  | 8,438  | 8,587  | 8,728  | 8,885  | 9,088  |
| Residual                  | 1,756                         | 201    | 200    | 200    | 200    | 200    | 200    | 200    | 200    | 200    | 200    |
| Total Net Imports         | 25,529                        | 24,752 | 24,169 | 24,407 | 24,908 | 25,387 | 25,828 | 26,195 | 26,642 | 27,145 | 27,691 |
| U.S. Market Price         | (U.S. Dollars per Metric Ton) |        |        |        |        |        |        |        |        |        |        |
| Decatur                   | 199.00                        | 166.23 | 177.45 | 184.03 | 182.98 | 185.11 | 189.38 | 197.25 | 203.94 | 208.79 | 214.58 |

Soybean Meal Trade

# World Soybean Oil

- Tight world vegetable oil stocks resulting from the previous year's poor soybean and palm oil crop, combined with strong world demand for oil, have resulted in a second year of high vegetable oil prices despite record crop production in the United States and the favorable outlook for the South American crop.
- Soybean oil net exports from Argentina are projected to increase by roughly 200 tmt between 1994/95 and 2003/04. Argentina will remain the world's leading trader of soybean oil with soybean oil net exports of 1.68 mmt in 2003/04.
- Recent growth in domestic consumption of soybean oil in Brazil is expected to continue over the projection period, reducing Brazil's capacity to export. Dropping to 910 tmt in 1994/95, net soybean oil exports are projected at just over 900 tmt during the remainder of the projection period.
- High soybeans imports in 1994/95 translate into increased production of meal and oil in the European Union. A 300 tmt increase in oil production in 1994/95 drives net exports to over 750 tmt. Over the projection period, net exports of soybean oil are not expected to change significantly, as increased domestic use of soybean oil keeps pace with production and imports.
- Soybean oil net imports of 900 tmt are expected in **China** in 1994/95, due to an income driven increase in demand for vegetable oil, and lack of available palm oil this season. Over the projection period, net imports are expected to remain stable at about 850 tmt, as the Chinese increase domestic production and crush of oilseeds and return to lower priced palm oil for most of their import needs.
|                           | 93/94   | 94/95  | 95/96  | 96/97  | 97/98  | 98/99       | 99/00     | 00/01  | 01/02                                 | 02/03  | 03/04  |
|---------------------------|---------|--------|--------|--------|--------|-------------|-----------|--------|---------------------------------------|--------|--------|
| Net Exporters             | ·       |        |        |        |        |             |           |        | · · · · · · · · · · · · · · · · · · · |        |        |
|                           |         |        |        |        | (1,000 | ) Metric To | ons)      |        |                                       |        |        |
| Argentina                 | 1,414   | 1,449  | 1,435  | 1,463  | 1,493  | 1,525       | 1,555     | 1,586  | 1,617                                 | 1,649  | 1,681  |
| Brazil                    | 1,387   | 910    | 969    | 963    | 934    | 930         | 930       | 945    | 963                                   | 964    | 966    |
| European Union            | 592     | 752    | 747    | 696    | 733    | 739         | 738       | 737    | 716                                   | 689    | 683    |
| Paraguay                  | 95      | 101    | 100    | 101    | 106    | 111         | 114       | 117    | 120                                   | 123    | 127    |
| Total Non-U.S.            | 3,488   | 3,213  | 3,251  | 3,223  | 3,266  | 3,305       | 3,337     | 3,386  | 3,416                                 | 3,425  | 3,457  |
| United States             | 635     | 878    | 614    | 700    | 758    | 817         | 875       | 901    | 951                                   | 1,016  | 1,066  |
| Trade Share               | 15.4%   | 21.5%  | 15.9%  | 17.8%  | 18.8%  | 19.8%       | 20.8%     | 21.0%  | 21.8%                                 | 22.9%  | 23.6%  |
| Total Net Exports         | 4,123   | 4,091  | 3,865  | 3,923  | 4,024  | 4,122       | 4,212     | 4,286  | 4,367                                 | 4,441  | 4,524  |
| Net Importers             |         |        |        |        |        |             |           |        |                                       |        |        |
| Canada                    | -10     | -13    | -9     | -8     | -6     | -5          | -3        | -3     | -1                                    | 1      | 2      |
| Eastern Europe            | 106     | 109    | 119    | 124    | 128    | 133         | 138       | 143    | 148                                   | 153    | 159    |
| Former Soviet Union       | 189     | 209    | 211    | 214    | 216    | 212         | 208       | 203    | 198                                   | 192    | 186    |
| Russian Republic          | 150     | 150    | 162    | 167    | 167    | 165         | 162       | 159    | 156                                   | 152    | 148    |
| Ukraine                   | 39      | 49     | 49     | 47     | 49     | 47          | 45        | 44     | 42                                    | 40     | 38     |
| Other Former Soviet Union | 0       | 10     | 0      | 0      | 0      | 0           | 0         | 0      | 0                                     | 0      | 0      |
| Japan                     | 10      | -0     | 8      | 3      | -2     | 1           | -1        | -0     | 2                                     | 4      | 6      |
| Developing                | 1,223   | 1,073  | 979    | 989    | 1,043  | 1,088       | 1,147     | 1,204  | 1,257                                 | 1,300  | 1,346  |
| China                     | 1,075 🛛 | 895    | 856    | 844    | 873    | 874         | 872       | 877    | 875                                   | 859    | 846    |
| India                     | 46      | 50     | 11     | 6      | 2      | 15          | 35        | 42     | 52                                    | 64     | 73     |
| Mexico                    | 80      | 100    | 80     | 90     | 103    | 117         | 133       | 151    | 171                                   | 192    | 214    |
| South Korea               | 15      | 24     | 27     | 35     | 46     | 60          | 74        | 90     | 106                                   | 123    | 141    |
| Taiwan                    | 7       | 2      | 5      | 14     | 19     | 22          | 33        | 43     | 53                                    | 62     | 73     |
| Rest of World             | 2,407   | 2,509  | 2,558  | 2,601  | 2,645  | 2,693       | 2,724     | 2,739  | 2,763                                 | 2,790  | 2,824  |
| Residual                  | 197     | 204    | 0      | 0      | 0      | -0          | 0         | 0      | 0                                     | 0      | -0     |
| Total Net Imports         | 4,123   | 4,091  | 3,865  | 3,923  | 4,024  | 4,122       | 4,212     | 4,286  | 4,367                                 | 4,441  | 4,524  |
| IIS Market Price          |         |        |        |        |        | are nor Mo  | tric Ton) |        |                                       |        |        |
| Decatur                   | 597.00  | 563.22 | 511.17 | 520.93 | 522.02 | 519.21      | 520.08    | 507.14 | 506.57                                | 514.63 | 511.78 |

Soybean Oil Trade

# World Wheat

- A 100 thousand ha increase in **Argentine** area and higher yields resulted in a 1.1 mmt increase in wheat production in 1994/95. Slow area expansion and moderate yield growth are projected for the next ten years, increasing exportable surpluses by nearly 2.5 mmt by 2003/04.
- Severe drought in **Australian** grain producing regions cut the wheat crop by nearly 50 percent compared to 1993/94 and reduced exports by nearly 8 mmt. Wheat production and exports increase in response to GATT constraints by the end of the 1990s as wheat prices increase relative to feed grain prices.
- Wheat area in **Canada** declined nearly 1.5 million ha in 1994/95 as canola plantings increased markedly. Although wheat area is projected to increase from 1994/95 levels, continued high canola production will likely prevent wheat plantings of the magnitude of 1992/93.
- Wheat exports by the European Union are expected to fall to 15.2 mmt in 1994/95 as set-asides and lower stock levels begin to constrain exportable surpluses. By 1998/99, GATT commitments will further constrain wheat exports.
- Wheat yields partially recovered from drought in 1994/95 in Eastern Europe and production increased 3 mmt above 1993/94. Further recovery is expected for wheat production, and this region is projected to become a net exporter of approximately 1 mmt per year in the future.
- **Russian** wheat area and yields decreased in 1994/95 and production fell 8.5 mmt from 1993/94. Further economic contraction is projected, resulting in a continuing decline in wheat feed use. Imports are expected to fall over the projection period.
- Drought hit Ukraine resulting in an 8 mmt reduction in the size of the wheat crop in 1994/95. However, with normal yields beginning in 1995/96, wheat production is expected to recover, creating exportable surpluses of 2.5 mmt by 2003/04.
- Chinese wheat production fell approximately 3 mmt in 1994/95 and demand growth resulted in a consumption increase of nearly 4 mmt from 1993/94. Net imports are expected to increase more than 6 mmt this year and continue to grow throughout the projection period, reaching 14.5 mmt by the end of the period.
- A 4.6 mmt decrease in wheat production in **Other African** and **Middle Eastern Countries** is expected to be offset by stock reductions, with domestic use remaining at nearly the same level as 1993/94. This is in spite of a 1.2 mmt reduction in imports. Although domestic use is projected to increase over the projection period, imports are likely to increase slowly. Most of this region's increase in imports is expected to be driven by oil exporting countries.
- Other Latin American countries are likely to continue relying heavily on imports to meet domestic wheat requirements. However, continuing debt problems are expected to constrain their abilities to buy on the world market. Consequently, imports are projected to increase only 1.6 mmt over the next ten years.
- The newly industrializing Asian countries are expected to continue their robust economic growth, but limited production capacities make it necessary for them to increase wheat imports to meet growing demand. Imports are projected to increase from 5.6 mmt in 1994/95 to 8.4 mmt in 2003/04.
- Most of the increase in wheat demand in other Asian countries will be met through domestic production over the next ten years, but imports will remain an important and growing source of wheat supply in this region. Imports are projected to increase nearly 2.5 mmt by 2003/04.

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|                            | 93/94  | 94/95  | 95/96  | 96/97  | 97/98       | 98/99       | 99/00    | 00/01  | 01/02  | 02/03    | 03/04  |
|----------------------------|--------|--------|--------|--------|-------------|-------------|----------|--------|--------|----------|--------|
| Net Exporters              |        |        |        |        |             |             |          |        |        |          |        |
|                            |        |        |        |        | (Millio     | n Metric To | ons)     |        |        |          |        |
| Argentina                  | 4.60   | 5.70   | 6.29   | 6.50   | 6.66        | 6.85        | 7.04     | 7.31   | 7.63   | 7.87     | 8,12   |
| Australia                  | 13.69  | 5.89   | 10.67  | 11.28  | 11.53       | 11.74       | 11.93    | 12.24  | 12.73  | 13.31    | 13.96  |
| Canada                     | 19.02  | 20.40  | 18.54  | 19.99  | 20.34       | 20.73       | 21.11    | 21.41  | 21.42  | 21.64    | 21.87  |
| Eastern Europe             | -1.88  | -0.15  | 0.76   | 1.34   | 1.30        | 1.24        | 1.18     | 1.11   | 1.02   | 0.92     | 0.81   |
| European Union             | 17.44  | 15.24  | 16.34  | 14.95  | 15.53       | 14.85       | 13.66    | 12.29  | 12.29  | 12.29    | 12.29  |
| Other Western Europe       | -0.03  | -0.07  | -0.16  | -0.04  | -0.13       | -0.19       | -0.18    | -0.13  | -0.05  | -0.02    | 0.01   |
| Ukraine                    | 0.40   | -0.50  | 0.48   | 0.82   | 1.18        | 1.42        | 1.40     | 1.52   | 1.96   | 2.30     | 2.59   |
| Total Non-U.S.             | 53.24  | 46.51  | 52.92  | 54.83  | 56.42       | 56.63       | 56.15    | 55.75  | 57.00  | 58.31    | 59.66  |
| United States              | 30.44  | 32.32  | 30.73  | 30.02  | 30.64       | 32.33       | 34.69    | 36.13  | 36.56  | 37.35    | 38.39  |
| Trade Share                | 36.4%  | 41.0%  | 36.7%  | 35.4%  | 35.2%       | 36.3%       | 38.2%    | 39.3%  | 39.1%  | 39.0%    | 39.2%  |
| Total Net Exports          | 83.68  | 78.84  | 83.65  | 84.85  | 87.06       | 88.97       | 90.83    | 91.88  | 93.56  | 95.66    | 98.06  |
| Net importers              |        |        |        |        |             |             |          |        | 1. A.  | <b>`</b> |        |
| Japan                      | 5.60   | 5.70   | 5.69   | 5.73   | 5.77        | 5.82        | 5.87     | 5.92   | 5.98   | 6.04     | 6.10   |
| Russia                     | 4.50   | 3.25   | 3.55   | 3.25   | 2.58        | 2.17        | 1.80     | 1.06   | 0.31   | -0.46    | -1.02  |
| Other Former Soviet Union  | 2.72   | 2.39   | 1.78   | 1.23   | 1.17        | 1.00        | 0.94     | 0.65   | 0.30   | -0.00    | -0.26  |
| Developing                 | 64.48  | 66.71  | 68.44  | 70.31  | 73.04       | 75.38       | 77.58    | 79.59  | 82.26  | 85.31    | 88.41  |
| China                      | 4.14   | 10.83  | 11.36  | 12.03  | 12.72       | 12.90       | 13.04    | 13.29  | 13.67  | 14.06    | 14.45  |
| High-Income East Asia      | 7.13   | 5.46   | 5.81   | 6.09   | 6.38        | 6.65        | 6.93     | 7.21   | 7.54   | 7.89     | 8.25   |
| India                      | 0.05   | -0.67  | -0.57  | -0.36  | 0.11        | 0.43        | 0.51     | 0.39   | 0.53   | 0.80     | 0.97   |
| Other Asia                 | 10.92  | 12.30  | 13.13  | 13.41  | 13.82       | 14.26       | 14.62    | 14.86  | 15.14  | 15.43    | 15.71  |
| Brazil                     | 5.70   | 5.70   | 5.55   | 5.66   | 5.79        | 5.88        | 6.05     | 6.24   | 6.43   | 6.65     | 6.88   |
| Mexico                     | 1.83   | 1.40   | 1.36   | 1.37   | 1.43        | 1.47        | 1.50     | 1.52   | 1.56   | 1.62     | 1.70   |
| Other Latin America        | 7.68   | 7.93   | 7.38   | 7.56   | 7.75        | 7.94        | 8.12     | 8.27   | 8.45   | 8.65     | 8.87   |
| Algeria                    | 4.50   | 4.00   | 4.34   | 4.47   | 4.62        | 4.78        | 4.93     | 5.11   | 5.32   | 5.54     | 5.78   |
| Egypt                      | 5.80   | 5.70   | 5.82   | 5.95   | 6.09        | 6.31        | 6.53     | 6.77   | 7.05   | 7.35     | 7.69   |
| Morocco                    | 2.50   | 0.80   | 0.94   | 1.04   | 1.16        | 1.28        | 1.42     | 1.56   | 1.71   | 1.84     | 1.98   |
| Tunisia                    | 0.73   | 1.00   | 0.74   | 0.78   | 0.83        | 0.88        | 0.93     | 0.99   | 1.06   | 1.13     | 1.21   |
| Other Africa & Middle East | 13.51  | 12.25  | 12.59  | 12.30  | 12.36       | 12.59       | 13.00    | 13.38  | 13.81  | 14.34    | 14.92  |
| Rest of World/Residual     | 6.38   | 0.78   | 4.19   | 4.34   | 4.50        | 4.60        | 4.64     | 4.66   | 4.71   | 4.77     | 4.82   |
| Total Net Imports          | 83.68  | 78.84  | 83.65  | 84.85  | 87.06       | 88.97       | 90.83    | 91.88  | 93.56  | 95.66    | 98.06  |
| U.S. Wheat Price           |        |        |        |        | (U.S. Dolla | ars per Mei | ric Ton) |        |        |          |        |
| FOB Gulf                   | 143.67 | 155.80 | 150.42 | 141.36 | 134.81      | 135.95      | 141.65   | 149.52 | 152.06 | 155.20   | 159.99 |

Wheat Trade

# World Rice

- A return to normal weather conditions in **Thailand** allows production to rebound to 13.8 mmt in 1994/95, a 1.2 mmt increase above the poor crop of the previous year. Net exports are projected to increase steadily from 4.5 mmt in 1994/95 to 6.2 mmt in 2003/04 in response to increased world demand and robust prices. Thailand is expected to maintain its position as the world's leading rice exporter, due to yield growth potential and stable per capita domestic consumption.
- Although Vietnam is projected to moderate its growth in area for rice production and diversify into other crops, continual yield growth along with limited increases in domestic consumption translate into solid growth in exportable supplies. Vietnam is projected to emerge as the world's second largest rice exporter with net exports of just over 2 mmt in 2002/2003, a position it is expected to maintain well into the next decade.
- Rice production in the U.S. reaches record levels in 1994/95, as the ARP rate is set to 0 percent. Excellent yield coupled with the higher planting result in a 27 percent increase in production above the previous year's crop. Net exports of 2.5 mmt in 1994/95 will drop off to just 2 mmt, due to a lack of new area available to rice as well as GATT commitments which will reduce the quantity of subsidized rice exports from 272 tmt in 1995 down to 39 tmt in 2000.
- Successive years of good crops have allowed **Pakistan** to rebuild stocks and maintain last year's net export level of about 1.3 mmt in 1994/95. Slowly increasing area and steady yield growth, combined with flat per capita domestic consumption, are projected to allow Pakistan to maintain exports just above 1 mmt throughout the projection period.
- Record rice crops in **Myanmar** in 1993/94 and 1994/95 can be attributed largely to a government initiative to expand the dry season crop. 1994/95 net exports climb to 800 tmt of mostly low-quality rice, largely as a result of China's inability to export low-quality rice. Lack of investment in Myanmar's outdated milling industry will limit its ability to increase net exports over the projection period.
- A second year of good production in **India**, combined with high stock levels, allows net exports to climb to 800 tmt in 1994/95. However, despite steady yield growth, growth in domestic consumption is projected to keep pace with production in India, limiting exports to 600 to 700 tmt over the rest of the projection period.
- Chinese rice area drops to 30 million ha in 1994/95, down 3 million ha from the 1990/91 level, as farmers continue to switch to competing crops due to relative prices. The loss of area and subsequent reduced production has caused stocks to be drawn to dangerously low levels in order to maintain domestic consumption. China is projected to be a net importer of over 200 tmt in 1994/95, after net exports of over 1 mmt in the two previous years. Without a major policy change, net exports are not expected to rebound to previous levels at any time over the projection period.
- Japan responds to the poor crop of 1993/94 with a 53 percent increase in production in 1994/95. This year's bumper crop will allow Japan to replenish its stocks and delay importing its required GATT commitment quantity of rice for 1995 until late in 1995/1996. Japan is not expected to import rice over the projection period, beyond what was agreed to in the GATT.
- Indonesia is expected to have net imports of over 600 tmt of rice in 1994/95 due to severe drought in several regions. Although Indonesia has an official policy of self-sufficiency in rice, it has been a major rice importer in 12 of the last 15 years, and is projected to maintain a net import position over the projection period.

| · · ·                  | 93/94     | 94/95  | 95/96  | 96/97  | 97/98       | 98/99       | 99/00            | 00/01  | 01/02  | 02/03  | 03/04  |
|------------------------|-----------|--------|--------|--------|-------------|-------------|------------------|--------|--------|--------|--------|
| Net Exporters          | <u></u> . |        |        |        |             |             |                  |        |        |        |        |
| •                      |           |        | •      |        | (1,00       | 0 Metric To | ons)             |        |        |        |        |
| China                  | 1,000     | -250   | 418    | 455    | 446         | 431         | 412 <sup>(</sup> | 384    | 351    | 308    | 260    |
| India                  | 626       | 800    | 651    | 657    | 716         | 742         | 731              | 709    | 670    | 602    | 560    |
| Myanmar (Burma)        | 702       | 806    | 885    | 877    | 858         | 872         | .863             | 862    | 851    | 851    | 858    |
| Pakistan               | 1,199     | 1,283  | 1,241  | 1,222  | 1,217       | 1,189       | 1,189            | 1,147  | 1,093  | 1.058  | 1,026  |
| Thailand               | 4,684     | 4,572  | 5,235  | 5,317  | 5.502       | 5,582       | 5,712            | 5,859  | 5.979  | 6,123  | 6,284  |
| Vietnam                | 2,000     | 2,058  | 2,128  | 2,146  | 2,133       | 2,116       | 2,122            | 2,162  | 2,134  | 2,091  | 2,057  |
| Total Non-U.S.         | 10,211    | 9,269  | 10,558 | 10,674 | 10,873      | 10,933      | 11,029           | 11,123 | 11,078 | 11,034 | 11,045 |
| United States          | 2.302     | 2.534  | 2.299  | 2.315  | 2.293       | 2:291       | 2.248            | 2.206  | 2.155  | 2.078  | 2.030  |
| Trade Share            | 18.4%     | 21.5%  | 17.9%  | 17.8%  | 17.4%       | 17.3%       | 16.9%            | 16.6%  | 16.3%  | 15.8%  | 15.5%  |
| Total Net Exports      | 12,513    | 11,802 | 12,857 | 12,989 | 13,166      | 13,224      | 13,277           | 13,329 | 13,233 | 13,112 | 13,075 |
| Net Importers          |           |        |        |        |             |             |                  |        |        |        |        |
| European Union         | 422       | 563    | 596    | 584    | 586         | 593         | 604              | 614    | 619    | 624    | 629    |
| Indonesia              | -427      | 695    | 495    | 537    | 515         | 516         | 488              | 478    | 480    | 435    | 443    |
| Japan                  | 2.200     | 98     | 379    | 455    | 531         | 607         | 683              | 758    | 758    | 758    | 758    |
| Saudi Arabia           | 870       | 728    | 742    | 750    | 759         | 772         | 786              | 800    | 814    | 829    | 844    |
| Rest of World/Residual | 9,448     | 9,718  | 10,645 | 10,664 | 10,776      | 10,736      | 10,716           | 10,679 | 10,562 | 10,465 | 10,400 |
| Total Net Imports      | 12,513    | 11,802 | 12,857 | 12,989 | 13,166      | 13,224      | 13,277           | 13,329 | 13,233 | 13,112 | 13,075 |
| Prices                 |           |        |        |        | (U.S. Dolla | ars per Me  | tric Ton)        |        |        |        |        |
| FOB Bangkok 100B NPQ*  | 294       | 267    | 269    | 270    | 273         | 280         | 284              | 292    | 294    | 300    | 310    |
| FOB Houston            | 457       | 359    | 372    | 370    | 372         | 379         | 384              | 394    | 396    | 404    | 416    |
|                        |           |        |        |        |             | /           |                  |        |        |        |        |

**Rice Trade** 

\* NPQ = Norminal Price Quote

# **World Cotton**

- Major cotton producing countries have experienced diminished yields for the third consecutive year due to disease and weather problems. Because the world faced the 1994/95 crop year with tight stocks, cotton prices skyrocketed with announcements of lower production from these regions. As former exporting regions were now relying on the world market or faced very high internal prices for their cotton, their advantages in textile production no longer prevailed, allowing many of the non-cotton producing regions to maintain or increase their use of cotton.
- Australia continues to produce cotton primarily for export, contrary to trends of increasing exports of value-added products currently in place in other producing countries. Due to drought, Australia's production for 1994/95 is pegged at 261,000 metric tons, down from 329,000 metric tons in 1993/94.
- Currently, many significant cotton producing regions, such as **China**, **India**, and **Pakistan**, are experiencing reduced production leading to extreme depletion of supplies available for export. A big unknown becomes the timing of these regions in overcoming yield problems and capturing historical production trends. In this analysis, this turnaround happens in 1996/97 as technological advancements begin to take effect.
- China is experiencing a year of diminished production due to pink bollworm and transitional acreage. Due to increases in the cotton procurement price as grain prices remain relatively stable, China is expected to increase the acreage of cotton with yields increasing slightly below trend. Production never reaches the levels needed for domestic mill use and China remains a net importer of cotton throughout the projection period.
- India and Pakistan once again experienced declining production in 1994/95 due to weather and disease problems which begin to improve by the 1996/97 crop year. Within the domestic spinning industries, India is expected to continue to increase use due to an optimistic macroeconomic outlook, but Pakistan slows from historical trends due to internal distribution problems. Even though production increases in these regions, the rebuilding of stocks supports extended high cotton exports from the United States.
- Uzbekistan has implemented a policy of self-sufficiency in grains production causing a decrease in area of 8 percent from 1993/94 even in the face of very high world prices, but yield increases do not lead to maintenance of 1993/94 levels of production. Because the Uzbekistani government is highly dependent on revenue from cotton exports, this acreage stays flat throughout the remainder of the forecast.
- The textile industry in **Russia** has declined as capital investments and a dwindling domestic market make feasible operation very difficult. Because Russia has barter agreements with other republics, cotton is still being imported at previous levels but, due to high prices on the world market, Russia became an exporter of raw cotton; a practice which continues until 2002/03.
- Net imports remain flat after years of decline as importing regions regain advantages in textile production due to higher priced cotton in the producing regions. In the European Union, Japan, South Korea, and Taiwan, imports only begin to decline substantially in 1996/97 and beyond as the least cost producers are able to place less expensive value-added products onto the world market.

|                           | 93/94 | 94/95 | 95/96 | 96/97 | 97/98   | 98/99       | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 |
|---------------------------|-------|-------|-------|-------|---------|-------------|-------|-------|-------|-------|-------|
| Net Exporters             |       |       |       | -     |         | بر<br>بر    |       |       |       |       |       |
|                           |       |       |       |       | (1.000  | ) Metric To | ns)   |       |       |       |       |
| Australia                 | 333   | 247   | 372   | -401  | 428     | 458         | 488   | 503   | 519   | 538   | 553   |
| China                     | -26   | -296  | -110  | -97   | -144    | -74         | -78   | -102  | -75   | -31   | -48   |
| India                     | 15    | 16    | -7    | -33   | -31     | 15          | 16    | 37    | 62    | 42    | 51    |
| Pakistan                  | -7    | -129  | -33   | -55   | -59     | -12         | 12    | 33    | 44    | 50    | 56    |
| Uzbekistan                | 1,351 | 1,165 | 969   | 972   | 967     | 986         | 995   | 1,000 | 990   | .965  | 953   |
| Total Non-U.S.            | 1,666 | 1,002 | 1,192 | 1,188 | 1,161   | 1,374       | 1,432 | 1,471 | 1,540 | 1,564 | 1,566 |
| United States             | 1,504 | 2,106 | 1,914 | 1,803 | 1,657   | 1,595       | 1,546 | 1,512 | 1,495 | 1,478 | 1,450 |
| Total Net Exports         | 3,170 | 3,109 | 3,106 | 2,991 | 2,819   | 2,969       | 2,978 | 2,983 | 3,036 | 3,041 | 3,016 |
| U.S. Trade Share of Net   | 47.4% | 67.8% | 61.6% | 60.3% | 58.8%   | 53.7%       | 51.9% | 50.7% | 49.3% | 48.6% | 48.1% |
| - <b>L</b>                |       |       |       |       |         |             |       |       |       |       |       |
| Net Importers             |       |       |       | 5     |         |             |       |       |       |       |       |
| European Union            | 830   | 750   | 682   | 646   | 625     | 607         | 591   | 573   | 552   | 537   | 515   |
| Japan                     | 434   | 402   | 399   | 399   | 396     | 398         | 378   | 355   | 330   | 297   | 264   |
| Russia                    | 435   | 411   | 345   | 326   | 319     | 319         | 324   | 333   | 343   | 361   | 375   |
| South Korea               | 354   | 363   | 353   | 344   | 338     | 334         | 323   | 313   | 304   | 298   | 289   |
| Taiwan                    | 272   | 278   | 271   | 261   | 262     | 258         | 250   | 243   | 231   | 220   | 203   |
| Rest of World             | 801   | 962   | 955   | 916   | 778     | 953         | 1,012 | 1,067 | 1,176 | 1,228 | 1,270 |
| Residual                  | 43    | -58   | 100   | 100   | 100     | 100         | 100   | 100   | 100   | 100   | 100   |
| Total Net Imports         | 3,170 | 3,109 | 3,106 | 2,991 | 2,819   | 2,969       | 2,978 | 2,983 | 3,036 | 3,041 | 3,016 |
| Total Exporte             | 5 955 | 6 302 | 6 225 | 6 065 | 5 910   | 5 959       | 5711  | 5 646 | 5 574 | 5 500 | 5 420 |
| U.S. Trade Share of Total | 25.7% | 33.4% | 30.7% | 29.7% | 28.5%   | 27.2%       | 26.9% | 26.8% | 26.8% | 26.8% | 26.7% |
|                           |       |       |       |       | (ILS Do | llars ner P | ound) |       |       |       |       |
| U.S. Farm Price           | 0.584 | 0.675 | 0.638 | 0.624 | 0.613   | 0 597       | 0 591 | 0 586 | 0 614 | 0.600 | 0.616 |
| Cotlook A Index*          | 0.707 | 0.817 | 0.790 | 0.762 | 0.748   | 0,727       | 0.720 | 0.713 | 0.749 | 0.731 | 0.752 |

**All Cotton Trade** 

\* The "A" index is the average of the five lowest CIF Northern European quotes of the following descriptions (Middling 1-3/32"): Memphis; Calif./Ariz.; Mexican; Central American; Paraguayan; Turkish Izmir/Antalya; Central Asian; Pakistani 1503; Indian H-4; Chinese 329; African 'Franc Zone'; Tanzanian; Greek; and Australian. Source: Cotlook, Ltd. Liverpool, England

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#### **World Sugar**

- European Union sugar production for 1994/95 is down nearly 12 percent from 93/94 levels due to adverse weather during both the planting and growing seasons for sugar beets. The poor crop is in turn responsible for the 30 percent decrease in net exports in 1994/95. According to the reform of the sugar regime that was adopted by the EU commission in November 1994, storage refunds for holding C quota sugar will be paid for only six months in 1995, and will be eliminated starting in 1996. The current production quotas of 11.2 mmt and 2.5 mmt for A and B quota sugar, and other general arrangements of the regime will remain unchanged through 2000/01, as long as GATT limits are not exceeded. Net exports are projected to drop off only slightly over the projection period in compliance with the GATT commitments.
- Cuban sugar production is projected to fall an additional 20 percent in 1994/95, for a total drop of 60 percent since 1990. With the loss of subsidies from the FSU, the outlook for recovery of the Cuban sugar economy has been dim. However, recent authorization of foreign investment into the Cuban sugar industry for the 1995/96 crop year curbs future production downfalls, allowing net exports to at least stabilize over the projection period.
- Partial deregulation of the sugar industry in Australia, along with a 2.5 percent annual increase in area allotments for sugarcane production through 1996, have allowed significant production growth in Australia. Good weather and increased cane area push production up by 12 percent in 1994/95, allowing exports of 3.8 mmt. A saturated domestic market combined with slow population growth gives rise to a stable quantity of exportable supplies throughout the projection period. Dry weather caused the production drop in 1993/94, and has historically caused the major year-to-year production fluctuations.
- Thailand's sugar production is projected to grow 22 percent over the period of 1994/95 to 2003/04. Poor weather and insect problems have hindered cane yields in recent years leaving ample opportunity for yield growth. Area growth is also being spurred by incentives to switch from upland rice to sugarcane in the lower Northeast. Despite steady growth in domestic demand for sugar, exportable surplus is projected at nearly 4 mmt by 2003/04.
- **Brazil** is the world's largest sugarcane producer, however the majority of the cane is diverted to ethanol rather than sugar production. Sugar production potential remains high in Brazil with future growth in both area and yields expected to outpace increased consumption, despite population and income growth. A 10 percent export tax was instituted in October 1994 to protect the domestic market from supply shortfalls. Net exports are projected to reach 3.3 mmt by 2003/04, an 18 percent increase from present levels.
- The high cost of inputs and lack of fuel and machinery continue to hamper sugar beet production, harvesting, and transportation efforts in the Former Soviet Union. A continued drawdown of stocks allows consumption to be maintained until the economy turns upward. Production and consumption of sugar are projected to increase marginally over the projection period as the economy recovers.
- Sugar production in **China** in 1994/95 dropped to only 6.2 mmt as sugar beet area continues to switch to soybeans and other crops due to relative prices. Cane area has also been lost to industrial expansion and competing crops in southern coastal regions. Barter trade with the FSU largely explains China's position as a net exporter in 1992 and 1993. Over the projection period, production increases will be minor, despite yield growth, due to expected continual loss of cane area. Consumption of sugar is expected to grow with population and income growth as stocks are released and imports are allowed. China is expected to maintain its net imports of about 1.2 mmt over the projection period.

|                     | 93/94  | 94/95  | 95/96  | 96/97  | 97/98  | 98/99       | 99/00  | 00/01  | 01/02  | 02/03  | 03/04  |
|---------------------|--------|--------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|
| Net Exporters       |        |        |        |        |        |             |        |        |        |        |        |
| •                   |        |        |        |        | (1,00  | 0 Metric To | ns)    |        |        |        |        |
| Australia           | 3,484  | 3,812  | 3,858  | 3,892  | 3,922  | 3,934       | 3,979  | 4,005  | 4,024  | 4,041  | 4,060  |
| Brazil              | 2,651  | 2,860  | 2,895  | 2,927  | 3,019  | 3,100       | 3,127  | 3,201  | 3,242  | 3,304  | 3,375  |
| Cuba                | 3,200  | 2,500  | 2,285  | 2,290  | 2,313  | 2,335       | 2,359  | 2,382  | 2,406  | 2,429  | 2,453  |
| European Union      | 4,411  | 3,081  | 3,301  | 3,203  | 3,195  | 3,061       | 2,986  | 2,917  | 2,905  | 2,893  | 2,874  |
| Thailand            | 3,000  | 3,225  | 3,469  | 3,521  | 3,574  | 3,633       | 3,722  | 3,794  | 3,869  | 3,936  | 3,996  |
| Total Net Exports   | 16,746 | 15,478 | 15,808 | 15,833 | 16,023 | 16,064      | 16,172 | 16,300 | 16,445 | 16,603 | 16,759 |
| Net Importers       |        |        |        |        |        |             |        |        |        |        |        |
| China               | -375   | 1,200  | 1,176  | 1,180  | 1,183  | 1,190       | 1,198  | 1,205  | 1,212  | 1,220  | 1,227  |
| Eastern Europe      | 458    | 188    | 191    | 213    | 199    | 183         | 166    | 148    | 129    | 108    | 87     |
| Former Soviet Union | 3,765  | 3,256  | 3,184  | 3,147  | 3,153  | 3,143       | 3,157  | 3,225  | 3,294  | 3,365  | 3,437  |
| Japan               | 1,632  | 1,622  | 1,627  | 1,626  | 1,636  | 1,647       | 1,663  | 1,681  | 1,696  | 1,712  | 1,728  |
| Rest of World       | 10,070 | 7,972  | 8,269  | 8,344  | 8,533  | 8,574       | 8,671  | 8,738  | 8,822  | 8,919  | 8,999  |
| Total Non-U.S.      | 15,550 | 14,238 | 14,447 | 14,509 | 14,703 | 14,737      | 14,854 | 14,997 | 15,153 | 15,325 | 15,478 |
| United States       | 1,196  | 1,240  | 1,361  | 1,324  | 1,319  | 1,326       | 1,318  | 1,303  | 1,292  | 1,278  | 1,281  |
| Trade Share         | 7.1%   | 8.0%   | 8.6%   | 8.4%   | 8.2%   | 8.3%        | 8.1%   | 8.0%   | 7.9%   | 7.7%   | 7.6%   |
| Total Net Imports   | 16,746 | 15,478 | 15,808 | 15,833 | 16,023 | 16,064      | 16,172 | 16,300 | 16,445 | 16,603 | 16,759 |
|                     |        |        |        | ÷ *    |        | (Cents per  | Pound) |        |        |        |        |
| FOB Caribbean Price | 10.03  | 11.89  | 10.67  | 10.79  | 10.27  | 10.66       | 10.73  | 10.99  | 11.16  | 11.25  | 11.48  |

Sugar Trade

# **World Livestock**

- World beef trade is projected to decline at an annual rate of over 1.6 percent per year until the year 2000. The decline is primarily due to GATT-related restrictions on exports of the European Union and lower import demand in the United States during the rising phase of the beef cycle. An expansion in beef trade is projected after the year 2000 as the U.S. beef cycle turns while import demand from Japan and other high-income Asian countries continues to grow. Expansion in production and exports is projected for the Oceanic countries (Australia and New Zealand), Argentina, and Brazil.
- World pork trade is projected to grow as the import demand of Japan and other high-income Asian countries continues to increase and environmental concerns limit domestic production. The United States becomes a net exporter by 1997, and rapidly increases its market share thereafter. China is the other expanding pork exporter.
- Health concerns and low feed prices contribute to the expansion of poultry industry worldwide. Increased import demand from Pacific Rim countries strengthens the **world poultry trade**. U.S. production and exports have consistently increased in the historical period and are projected to maintain a steady growth rate during the projection period.
- Beef exports from the European Union (EU) show general declines from recent levels through the year 1999, after which a marginal increase is expected. The share of unsubsidized exports in the pork exports total is projected to be about 30 percent in the long run. Faster growth in EU poultry consumption, relative to production, is expected to reduce net exports by nearly 50 percent over the projection period.
- Low beef prices and reduced support to dairy decrease domestic supply of beef in **Japan**. Increased consumption, resulting from lower prices, and competitive world export leads to expanding beef imports. Pork imports are also projected to increase as production is restrained by environmental concerns.
- Meat consumption in the Former Soviet Union, which had previously been subsidized, has declined substantially in the recent past due to economic deterioration, thereby depressing meat import demand. However, relative prices and quality preferences of high-income groups will contribute to moderate growth in pork and poultry imports.
- The increasing production phase of the beef cycle in the United States contributes to an early decline in world prices, but subsequently the trend is reversed and the prices increase at an average annual rate of about 4 percent between 1997 to 2004. Pork and poultry prices remain relatively stable.

| н.<br>На селото се | 1994  | 1995     | 1996  | 1997  | 1998   | 1999      | 2000  | 2001  | 2002  | 2003  | 2004  |
|--|-------|----------|-------|-------|--------|-----------|-------|-------|-------|-------|-------|
| Beef and Veal  |       | <u> </u> |       |       |        |           |       |       |       |       |       |
| Net Exporters  |       |          |       |       | (1,000 | Metric To | ns)   |       |       |       |       |
| Argentina  | 289   | 299      | 302   | 264   | 228    | 215       | 189   | 197   | 216   | 244   | 260   |
| Australia  | 1,155 | 1,190    | 1,133 | 1,083 | 1,129  | 1,178     | 1,181 | 1,142 | 1,154 | 1,164 | 1,199 |
| Brazil   | 390   | 460      | 451   | 398   | 406    | 436       | 443   | 458   | 456   | 477   | 475   |
| Eastern Europe   | 22    | -25      | -23   | -37   | -44    | -29       | -26   | 5     | 23    | 35    | . 33  |
| European Union   | 719   | 417      | 367   | 397   | 355    | 330       | 368   | 405   | 421   | 420   | 388   |
| New Zealand  | 460   | 482      | 496   | 504   | 514    | 528       | 542   | 554   | 565   | 574   | 586   |
| Total Net Exports  | 3,035 | 2,823    | 2,725 | 2,607 | 2,589  | 2,660     | 2,697 | 2,762 | 2,834 | 2,914 | 2,941 |
| Net Importers  | -     |          |       |       |        |           |       |       |       |       |       |
| Canada   | 55    | 45       | 76    | 76    | 76     | 76        | 76    | 76    | 76    | 76    | 76    |
| Former Soviet Union  | 155   | 173      | 165   | 153   | 143    | 135       | 133   | 129   | 120   | 96    | 78    |
| Japan  | 829   | 872      | 874   | 862   | 923    | 927       | 955   | 959   | 961   | 974   | 980   |
| Mexico   | 105   | 125      | 131   | 145   | 150    | 144       | 137   | 131   | 126   | 122   | 120   |
| United States  | 368   | 381      | 206   | 61    | -27    | 61        | 99    | 195   | 289   | 331   | 321   |
| Rest of World/Residual   | 1,522 | 1,227    | 1,275 | 1,311 | 1,324  | 1,318     | 1,296 | 1,272 | 1,261 | 1,315 | 1,365 |
| Total Net Imports  | 3,035 | 2,823    | 2,725 | 2,607 | 2,589  | 2,660     | 2,697 | 2,762 | 2,834 | 2,914 | 2,941 |
| Pork   |       |          |       |       |        |           |       |       | -     |       |       |
| Net Exporters  |       |          |       |       |        |           |       |       |       |       |       |
| Canada   | 295   | 349      | 348   | 343   | 327    | 318       | 332   | 348   | 347   | 344   | 352   |
| China  | 175   | 187      | 221   | 237   | 253    | 272       | 291   | 312   | 334   | 358   | 383   |
| Eastern Europe   | 39    | 81       | 150   | 104   | 53     | 59        | 93    | 90    | 63    | 77    | . 111 |
| European Union   | 650   | 661      | 675   | 674   | 635    | 696       | 361   | 183   | 435   | 526   | 442   |
| Other Western Europe   | 8     | 0        | 2     | 4     | 6      | 8         | 10    | 12    | 14    | 16    | 18    |
| Taiwan   | 293   | 286      | 291   | 292   | 286    | 286       | 294   | 299   | 295   | 294   | 300   |
| Total Net Exports  | 1,460 | 1,564    | 1,687 | 1,653 | 1,561  | 1,638     | 1,381 | 1,244 | 1,488 | 1,615 | 1,606 |
| Net Importers  |       |          |       |       | -      |           |       |       |       |       |       |
| Former Soviet Union  | -3    | 82       | 187   | 201   | 216    | 235       | 238   | 240   | 244   | 227   | 212   |
| Hong Kong  | 197   | 197      | 194   | 201   | 208    | 209       | 208   | 211   | 218   | 219   | 218   |
| Japan  | 657   | 667      | 685   | 736   | 786    | 832       | 879   | 919   | 958   | 999   | 1,039 |
| Mexico   | 54    | 58       | 71    | 84    | 88     | 77        | 70    | 73    | 89    | 96    | 99    |
| United States  | 99    | 114      | 120   | -9    | -189   | -164      | -439  | -641  | -496  | -423  | -453  |
| Rest of World/Residual   | 455   | 445      | 431   | 441   | 451    | 448       | 425   | 441   | 476   | 496   | 490   |
| Total Net Imports  | 1,460 | 1,564    | 1,687 | 1,653 | 1,561  | 1,638     | 1,381 | 1,244 | 1,488 | 1,615 | 1,606 |

Meat Trade

|                                       | 1994  | 1995  | 1996  | 1997  | 1998        | 1999          | 2000  | 2001  | 2002  | 2003  | 2004  |
|---------------------------------------|-------|-------|-------|-------|-------------|---------------|-------|-------|-------|-------|-------|
| Broiler Meat                          |       |       |       |       |             |               | _     |       |       |       |       |
| Net Exporters                         |       | • .   |       |       | (1,000      | Metric To     | ns)   |       |       |       | •     |
| Brazil                                | 460   | 453   | 450   | 457   | 463         | 467           | 464   | 472   | 474   | 476   | 479   |
| Eastern Europe                        | -32   | -61   | -43   | -23   | -10         | 7             | 25    | 41    | 53    | 65    | 79    |
| European Union                        | 556   | 596   | 676   | 616   | 536         | 393           | 384   | 360   | 342   | 334   | 318   |
| Thailand                              | 160   | 163   | 179   | 194   | 206         | 219           | 233   | 246   | 258   | 269   | 282   |
| United States                         | 1,275 | 1,365 | 1,233 | 1,233 | 1,374       | 1,554         | 1,613 | 1,693 | 1,789 | 1,857 | 1,915 |
| Total Net Exports                     | 2,419 | 2,515 | 2,495 | 2,477 | 2,569       | 2,640         | 2,720 | 2,813 | 2,916 | 3,002 | 3,073 |
| Net Importers                         |       | · .   |       |       |             |               |       | *     |       | • • • |       |
| Canada                                | 46    | 45    | 55    | 64    | 69          | 71            | 91    | 104   | 120   | 120   | 110   |
| Former Soviet Union                   | 394   | 439   | 396   | 363   | 338         | 317           | 299   | 292   | 286   | 282   | 279   |
| Hong Kong                             | 219   | 223   | 239   | 255   | 271         | 284           | 295   | 310   | 325   | 340   | 354   |
| Japan                                 | 425   | 424   | 418   | 399   | 480         | 545           | 606   | 659   | 727   | 793   | 856   |
| Mexico                                | 241   | 261   | 271   | 281   | 291         | 301           | 311   | 321   | 322   | 323   | 324   |
| Saudi Arabia                          | 249   | 272   | 276   | 279   | 286         | 290           | 293   | 297   | 303   | 307   | 311   |
| Rest of World/Residual                | . 845 | 850   | 840   | 835   | 836         | 832           | 825   | 830   | 833   | 837   | 838   |
| Total Net Imports                     | 2,419 | 2,515 | 2,495 | 2,477 | 2,569       | 2,640         | 2,720 | 2,813 | 2,916 | 3,002 | 3,073 |
| U.O. Maylesh Drives                   |       |       |       |       | (110 Dalla  |               |       |       |       |       |       |
| U.S. Market Prices                    | 4 647 | 4 470 | 4 400 | 4 950 | (U.S. Dolla | irs per iviet |       | 4 700 | 4 707 | 4 007 | 4 770 |
| lowa-Southern Minnesota               | 1,517 | 1,479 | 1,430 | 1,356 | 1,392       | 1,47.5        | 1,601 | 1,723 | 1,787 | 1,637 | 1,775 |
| Barrows and Gilts                     | 884   | 902   | 989   | 931   | 855         | 921           | 1,037 | 1,032 | 961   | 1,004 | 1,087 |
| 12-City Broilers                      | 1,228 | 1,165 | 1,199 | 1,225 | 1,199       | 1,212         | 1,252 | 1,273 | 1,261 | 1,268 | 1,291 |
| Eastern Region Wholesale              |       |       |       | ,     | •           | •             |       |       |       |       |       |
| Turkey                                | 1,448 | 1,425 | 1,440 | 1,445 | 1,412       | 1,432         | 1,443 | 1,467 | 1,444 | 1,444 | 1,460 |
| · · · · · · · · · · · · · · · · · · · |       |       |       |       | ·····       |               |       |       |       | ·     |       |

Meat Trade (continued)

#### World Dairy

- The world dairy sector is, in general, strengthened by increased import access and restrictions on subsidized exports stipulated under the recently concluded GATT agreement. This enables competitive producers to expand their share of world dairy markets.
- World dairy prices are projected to strengthen, in general, during the projection period. The European Union, in response to restrictions on cheese exports, is expected to shift more of the industrial milk to butter/nonfat dry milk production, resulting in a relative strengthening of world cheese prices. Butter prices, however, do not fall as rapidly as in the past when large stocks of butter were liquidated, primarily because stocks levels are relatively low at present.
- The GATT-required reduction in the European Union's exports, along with import access commitments, will inhibit the growth of the cheese industry that has expanded by over 10 percent within the last five years.
- The United States, the world's second largest cheese producer, is projected to expand its cheese production from 3.2 mmt to 4.4 mmt by the end of the projection period. However, consumption grows faster than production, absorbing the additional cheese imports that result from GATT related import quota relaxation.
- Cheese exports from New Zealand and Australia together increase by over 40 percent during the 1995 to 2000 period. Japan is expected to remain the largest cheese importer over the projection period with net imports of 180 tmt in 2004.
- The Former Soviet Union has historically been the largest importer of butter and is projected to hold that position over the entire projection period. Cheese imports experience moderate growth. Production of all major dairy products is also expected to exhibit moderate growth in the projection period following the economic turnaround after 1997.
- Demand for other dairy products, especially **whole milk powder**, by low-income African and Latin American countries is projected to increase as new processing technology becomes available for enhancing shelf life. Algeria, which was one of the largest dairy importers in the early 1980s, reduced its import demand considerably in the early 1990s. The recent policy change with respect to selected dairy products would result in subsidized imports.

| Butter         (1,000 Metric Tons)           Australia         85         89         95         101         106         109         107         108         109         111           Canada         3         1         1         1         0         1  |     |                               | 2003 | 2002 | 2001 | 2000     | 1999       | 1998   | 1997 | 1996  | 1995 | 1994 |                        |
|---|-----|-------------------------------|------|------|------|----------|------------|--------|------|-------|------|------|------------------------|
| Net Exporters         (1,000 Metric Tons)           Australia         85         89         95         101         106         109         107         108         109         111           Canada         3         1         1         1         1         0         1         1         1         1           Earopean Union         140         160         156         149         152         158         161         169         166         175           New Zealand         293         264         261         270         271         280         293         303         313         314.           Other Western Europe         38         40         40         39         38         38         37         37         37           United States         117         72         71         70         69         67         66         66         66           Total Net Exports         647         600         598         604         609         623         637         654         662         672           Net Importers         Total Net Exports         2         4         2         3         9         111         12  |     |                               |      |      |      |          |            |        |      |       |      |      | Butter                 |
| Australia       85       89       95       101       106       109       107       108       109       111         Canada       3       1       1       1       1       0       1       1       1       1       1         Earopada       3       1       1       1       1       0       1<   |     |                               |      |      |      | ns)      | Metric Tor | (1.000 |      |       |      |      | Net Exporters          |
| Canada       3       1       1       1       1       0       1       1       1       1       1         Eastern Europe       -28       -25       -25       -26       -27       -29       -30       -30       -31       -32         European Union       140       160       156       149       152       158       161       169       166       175         New Zealand       293       203       203       303       313       314  | 112 |                               | 111  | 109  | 108  | ,<br>107 | 109        | 106    | 101  | 95    | 89   | 85   | Australia              |
| Eastern Europe       -28       -25       -25       -26       -27       -29       -30       -30       -31       -32         European Union       140       160       156       149       152       158       161       169       166       175         New Zealand       293       264       261       270       271       280       293       303       313       314         Other Western Europe       38       40       40       40       39       38       38       37       37       37         United States       117       72       71       70       69       67       66       66       66       66         Total Net Exports       647       600       598       604       609       623       637       654       662       672         Net Importers   | . 1 |                               | 1    | 1    | 1    | 1        | 0          | · 1    | 1    | 1.    | 1.   | 3    | Canada                 |
| European Union       140       160       156       149       152       158       161       169       166       175         New Zealand       293       264       261       270       271       280       293       303       313       314         Other Western Europe       38       40       40       40       39       38       38       37       37       37         United States       117       72       71       70       69       67       66       66       66       66         Total Net Exports       647       600       598       604       609       623       637       654       662       672         Net Importers       Former Soviet Union       213       187       178       185       194       197       196       196       194       196         Japan       0       2       2       4       2       3       9       11       12       14         Mexico       20       20       19       18       17       17       16       15       14       13         Total Net Imports       647       600       598       604       609 <td< td=""><td>-33</td><td>2 .</td><td>-32</td><td>-31</td><td>-30</td><td>-30</td><td>-29</td><td>-27</td><td>-26</td><td>-25</td><td>-25</td><td>-28</td><td>Eastern Europe</td></td<>   | -33 | 2 .                           | -32  | -31  | -30  | -30      | -29        | -27    | -26  | -25   | -25  | -28  | Eastern Europe         |
| New Zealand         293         264         261         270         271         280         293         303         313         314           Other Western Europe         38         40         40         40         39         38         38         37         37         37           United States         117         72         71         70         69         67         66         672         Not         10         213         187         178         185         194         197         196         194         196         194         196         194         144         13         133         244         14         130         106         105         14         13         134         14   | 180 | 5                             | 175  | 166  | 169  | 161      | 158        | 152    | 149  | 156   | 160  | 140  | European Union         |
| Other Western Europe         38         40         40         40         39         38         38         37         37         37           United States         117         72         71         70         69         67         66         672         Net Importers         7   | 320 | ta a                          | 314  | 313  | 303  | 293      | 280        | 271    | 270  | 261   | 264  | 293  | New Zealand            |
| United States       117       72       71       70       69       67       66       66       66       66       66         Total Net Exports       647       600       598       604       609       623       637       654       662       672         Net Importers       Former Soviet Union       213       187       178       185       194       197       196       196       194       196         Japan       0       2       2       4       2       3       9       11       12       14         Mexico       20       20       19       18       17       17       16       15       14       13         Rest of World/Residual       414       392       398       396       407       417       432       441       450         Total Net Imports       647       600       598       604       609       623       637       654       662       672         Cheese       Net Exporters       Australia       78       84       100       109       115       113       108       106       105         Eastern Europe       -13       -14       -15 <t< td=""><td> 36</td><td><b>7</b>.</td><td>. 37</td><td>37</td><td>37</td><td>38</td><td>38</td><td>39</td><td>40</td><td>40</td><td>40</td><td>38</td><td>Other Western Europe</td></t<>   | 36  | <b>7</b> .                    | . 37 | 37   | 37   | 38       | 38         | 39     | 40   | 40    | 40   | 38   | Other Western Europe   |
| Total Net Exports       647       600       598       604       609       623       637       654       662       672         Net Importers       Former Soviet Union       213       187       178       185       194       197       196       196       194       196         Japan       0       2       2       4       2       3       9       11       12       14         Mexico       20       20       19       18       17       17       16       15       14       13         Rest of World/Residual       414       392       398       396       407       417       432       441       450         Total Net Imports       647       600       598       604       609       623       637       654       662       672         Cheese       Vet       Exporters       Australia       78       84       100       109       115       113       108       106       105       113       118       106       105       13       -13       -12       -13       -13       -12       -13       -13       -12       -13       -13       -12       -13       -13  | 66  | <b>3</b> .                    | 66   | 66   | 66   | 66       | 67         | 69     | 70   | 71    | 72   | 117  | United States          |
| Net Importers         Former Soviet Union         213         187         178         185         194         197         196         196         194         196           Japan         0         2         2         4         2         3         9         11         12         14           Mexico         20         20         19         18         17         17         16         15         14         13           Rest of World/Residual         414         392         398         396         407         417         432         441         450           Total Net Imports         647         600         598         604         609         623         637         654         662         672           Cheese         Vet Exporters         Vet Exporter         Vet Exporter         Vet Exporter         Vet Exporter         Vet Exportex         Vet Exportex         Vet E   | 683 | 2 ; ·                         | 672  | 662  | 654  | 637      | 623        | 609    | 604  | 598   | 600  | 647  | Total Net Exports      |
| Former Soviet Union         213         187         178         185         194         197         196         196         194         196           Japan         0         2         2         4         2         3         9         11         12         14           Mexico         20         20         19         18         17         17         16         15         14         13           Rest of World/Residual         414         392         398         396         407         417         432         441         450           Total Net Imports         647         600         598         604         609         623         637         654         662         672           Cheese         Vet Exporters         Vet Exporters <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Net Importers</td></th<> |     |                               |      |      |      |          |            |        |      |       |      |      | Net Importers          |
| Japan       0       2       2       4       2       3       9       11       12       14         Mexico       20       20       19       18       17       17       16       15       14       13         Rest of World/Residual       414       392       398       398       396       407       417       432       441       450         Total Net Imports       647       600       598       604       609       623       637       654       662       672         Cheese       Vet Exporters       Australia       78       84       100       109       115       115       113       108       106       105         Eastern Europe       -13       -14       -15       -15       -14       -13       -12       -13       -13         European Union       395       401       417       411       377       351       335       310       315       311         New Zealand       159       178       189       201       223       241       260       282       290       301   | 197 | 6                             | 196  | 194  | 196  | 196      | 197        | 194    | 185  | 178   | 187  | 213  | Former Soviet Union    |
| Mexico         20         20         19         18         17         17         16         15         14         13           Rest of World/Residual         414         392         398         398         396         407         417         432         441         450           Total Net Imports         647         600         598         604         609         623         637         654         662         672           Cheese         Vet Exporters         Australia         78         84         100         109         115         113         108         106         105           Eastern Europe         -13         -14         -15         -15         -14         -13         -12         -13         -13           European Union         395         401         417         411         377         351         335         310         315         311           New Zealand         159         178         189         201         223         241         260         282         290         301  | 16  | 1                             | 14   | 12   | 11   | 9        | 3          | 2      | 4    | 2     | · 2  | 0 `  | Japan                  |
| Rest of World/Residual       414       392       398       398       396       407       417       432       441       450         Total Net Imports       647       600       598       604       609       623       637       654       662       672         Cheese       Vet Exporters         Australia       78       84       100       109       115       113       108       106       105         Eastern Europe       -13       -14       -15       -15       -14       -13       -12       -13       -13         European Union       395       401       417       411       377       351       335       310       315       311         New Zealand       159       178       189       201       223       241       260       282       290       301   | 12  | }                             | 13   | 14   | 15   | 16       | · 17 ·     | 17     | 18   | 19    | 20   | 20   | Mexico                 |
| Total Net Imports       647       600       598       604       609       623       637       654       662       672         Cheese       Net Exporters         Australia       78       84       100       109       115       115       113       108       106       105         Eastern Europe       -13       -14       -15       -15       -14       -13       -12       -13       -13         European Union       395       401       417       411       377       351       335       310       315       311         New Zealand       159       178       189       201       223       241       260       282       290       301  | 458 | ).                            | 450  | 441  | 432  | 417      | 407        | 396    | 398  | 398   | 392  | 414  | Rest of World/Residual |
| Cheese         Net Exporters           Australia         78         84         100         109         115         115         113         108         106         105           Eastern Europe         -13         -14         -15         -15         -14         -13         -12         -13         -13           European Union         395         401         417         411         377         351         335         310         315         311           New Zealand         159         178         189         201         223         241         260         282         290         301  | 683 | <u>2</u> · .                  | 672  | 662  | 654  | . 637    | 623        | 609    | 604  | 598   | 600  | 647  | Total Net Imports      |
| Net ExportersAustralia7884100109115115113108106105Eastern Europe-13-14-15-15-14-13-13-12-13-13European Union395401417411377351335310315311New Zealand159178189201223241260282290301   |     |                               |      |      |      |          |            |        |      |       |      |      | Cheese                 |
| Net Exporters         78         84         100         109         115         115         113         108         106         105           Australia         78         84         100         109         115         115         113         108         106         105           Eastern Europe         -13         -14         -15         -15         -14         -13         -12         -13         -13           European Union         395         401         417         411         377         351         335         310         315         311           New Zealand         159         178         189         201         223         241         260         282         290         301   |     |                               |      |      |      |          |            |        |      |       |      |      |                        |
| Australia       78       84       100       109       115       113       108       106       105         Eastern Europe       -13       -14       -15       -15       -14       -13       -13       -12       -13 </td <td>400</td> <td>-</td> <td>405</td> <td>400</td> <td>400</td> <td>440</td> <td>·.</td> <td>445</td> <td>400</td> <td>400</td> <td></td> <td>70</td> <td>Net Exporters</td>   | 400 | -                             | 405  | 400  | 400  | 440      | ·.         | 445    | 400  | 400   |      | 70   | Net Exporters          |
| Eastern Europe         -13         -14         -15         -15         -14         -13         -12         -13         -13         -12         -13         -13         -13         -12         -13         -13         -13         -13         -12         -13  | 103 | )<br>\                        | 105  | 106  | 108  | 113      | 115        | 115    | 109  | 100   | 84   | 78   | Australia              |
| European Union         395         401         417         411         377         351         335         310         315         311           New Zealand         159         178         189         201         223         241         260         282         290         301  | -13 | \$<br>1 <sup>10</sup> - 1 - 1 | -13  | -13  | -12  | -13      | -13        | -14    | -15  | -15   | -14  | -13  | Eastern Europe         |
| New Zealand 159 178 189 201 223 241 260 282 290 301   | 306 |                               | 311  | 315  | 310  | 335      | 351        | 377    | 411  | 417   | 401  | 395  | European Union         |
|   | 312 |                               | 301  | 290  | 282  | 260      | 241        | 223    | 201  | 189   | 1/8  | 159  | New Zealand            |
| Other Western Europe 57 57 58 59 61 63 64 66 67 68  | 69  | \$                            | 68   | 67   | 66   | 64       | 63         | 61     | 59   | 58    | 5/   | 57   | Other Western Europe   |
| Total Net Exports 676 707 749 764 762 757 759 755 765 772   | //8 | 2                             | 112  | /65  | 755  | 759      | /5/        | 762    | 764  | 749   | 707  | 676  | I otal Net Exports     |
| Net Importers   |     |                               |      |      |      |          |            |        |      |       |      |      | Net Importers          |
| Canada 11 12 12 12 12 12 13 13 13 13  | 13  | 3                             | 13   | 13   | 13   | 13       | 12         | 12     | 12   | 12    | 12   | 11   | Canada                 |
| Former Soviet Union 4 5 6 7 8 9 10 11 12 13   | 14  | 3                             | 13   | 12   | 11   | 10       | 9          | 8      | 7    | 6     | 5    | 4    | Former Soviet Union    |
| Japan 140 137 141 147 150 152 158 163 170 174   | 180 | 1                             | 174  | 170  | 163  | 158      | 152        | 150    | 147  | 141   | 137  | 140  | Japan                  |
| Mexico 35 31 32 32 31 30 30 29 30 30  | 30  | )                             | 30   | 30   | 29   | 30       | 30         | 31     | 32   | 32    | 31   | 35   | Mexico                 |
| United States 140 119 124 130 135 141 147 147 147 147   | 147 | 7                             | 147  | 147  | 147  | 147      | 141        | 135    | 130  | . 124 | 119  | 140  | United States          |
| Rest of World/Residual 345 404 434 437 425 412 403 393 394 396  | 394 | 3                             | 396  | 394  | 393  | 403      | 412        | 425    | 437  | 434   | 404  | 345  | Rest of World/Residual |
| Total Net Imports         676         707         749         764         762         757         759         755         765         772   | 778 | 2                             | 772  | 765  | 755  | 759      | 757        | 762    | 764  | 749   | 707  | 676  | Total Net Imports      |

Dairy Product Trade

|                            | 1994  | 1995  | 1996  | 1997  | 1998       | 1999       | 2000     | 2001  | 2002  | 2003  | 2004  |
|----------------------------|-------|-------|-------|-------|------------|------------|----------|-------|-------|-------|-------|
| Nonfat Dry Milk            |       |       |       |       |            |            |          |       |       |       |       |
| Net Exporters              |       |       |       |       | (1,000     | Metric To  | ns)      |       |       |       |       |
| Australia                  | 149   | 160   | 169   | 178   | 184        | 187        | 183      | 182   | 183   | 184   | 183   |
| Canada                     | 30    | 27    | 27    | 31    | 28         | 28         | 29       | 21    | 15    | 8     | 1     |
| Eastern Europe             | 80    | 86    | 85    | 84    | 82         | 81         | 81       | 80    | 79    | 78    | 78    |
| European Union             | 200   | 156   | 169   | 189   | 221        | 248        | 268      | 295   | 316   | 363   | 393   |
| New Zealand                | 145   | 145   | 147   | 147   | 140        | 135        | 134      | 128   | 124   | 99    | 85    |
| Other Western Europe       | 53    | 37    | 36    | 35    | 34         | 33         | 32       | 31    | 30    | 29    | 28    |
| United States              | 119   | 117   | 108   | 99    | 99         | 95         | 91       | 91    | 91    | 91    | 91    |
| Total Net Exports          | 776   | 729   | 741   | 762   | 788        | 806        | 817      | 829   | 837   | 852   | 859   |
| Net Importers              |       |       |       |       |            |            |          |       |       | 7     |       |
| Former Soviet Union        | 0     | 4     | 3     | 2     | 1          | 0          | -0       | -1    | -1    | -2    | -2    |
| Japan                      | 60    | 94    | 94    | 94    | 95         | 96         | 97       | 97    | 98    | 99    | 100   |
| Mexico                     | 180   | 144   | 149   | 152   | 156        | 159        | 160      | 162   | 162   | 165   | 166   |
| Rest of World/Residual     | 535   | 486   | 496   | 514   | 536        | 552        | 561      | 570   | 577   | 590   | 595   |
| Total Net Imports          | 776   | 729   | 741   | 762   | 788        | 806        | 817      | 829   | 837   | 852   | 859   |
| FOB Price, Northern Europe |       |       |       | (     | U.S. Dolla | rs per Met | ric Ton) |       |       |       |       |
| Butter                     | 1,440 | 1,541 | 1,543 | 1,544 | 1,537      | 1,533      | 1,531    | 1,528 | 1,525 | 1,523 | 1,520 |
| Cheese                     | 1,830 | 1,812 | 1,809 | 1,816 | 1,851      | 1,877      | 1,898    | 1,926 | 1,917 | 1,931 | 1,940 |
| Nonfat Dry Milk            | 1,559 | 1,574 | 1,541 | 1,518 | 1,482      | 1,462      | 1,454    | 1,436 | 1,429 | 1,396 | 1,384 |

Dairy Product Trade (continued)

# U.S. Crops

- U.S. Corn
- U.S. Sorghum
- U.S. Barley
- U.S. Oats
- U.S. Hay
- U.S. Soybeans and Soybean Products
- U.S. Wheat
- U.S. Rice
- U.S. Upland Cotton and Cottonseed
- U.S. Sugar and High-Fructose Corn Syrup

#### 50 / U.S. Crops

## U.S. Corn

- Corn farmers recovered well from the Flood of 1993, expanding **planted area** to 79.2 million acres in 1994/95. Planted area is projected to fall to 75.8 million acres in 1995/96 due to lower prices and a 7.5 percent ARP rate.
- The ARP rate is projected to be 5.0 percent in 1996/97 and stay at that rate until 1999/00. In 2000/01, the ARP rate drops to 2.5 percent for two years and then drops again to 0 percent for the remainder of the baseline. The lower ARP rates coupled with higher prices cause corn **planted area** to increase to 82.4 million acres by 2003/04.
- Net acreage flexed out of corn is projected to be 3.4 million acres in 1995/96, most of which will be planted to soybeans. On average, 3.2 million acres per year are projected to flex out of corn and into other crops.
- With favorable growing conditions throughout the Midwest, the national average corn yield rose to 138.6 bushels per acre in 1994/95, a new record high. Assuming normal weather, corn yields should drop to 126.0 bushels per acre in 1995/96 and then grow to 135.8 bushels by 2003/04.
- Lower corn prices and larger animal inventories increased **feed use** to 5.6 billion bushels in 1994/95. Feed usage should decline in 1995/96 to 5.3 billion bushels as corn prices rise. Steady growth in several livestock categories and stable crop prices cause feed usage to rise during the baseline period, reaching 5.7 billion bushels in 2002/03.
- With mandates from the Clinton administration and the focus on ethanol production to meet oxygenated fuel requirements of the reformulated gasoline program, corn used for **fuel alcohol** production is projected to continue strong growth throughout the projection period. Ethanol production is projected to use 875 million bushels of corn by 2003/04. Growth in other domestic uses of corn, such as high-fructose corn syrup, is relatively modest.
- Feed-grain production problems in Australia and Eastern Europe coupled with strong domestic utilization in China boosted U.S. corn exports to more than 1.9 billion bushels in 1994/95. With substantial recovery by competing exporters in 1995/96, U.S. exports decline, but then expand to 2.3 billion bushels by the end of the projection.
- Corn ending stocks in 1994/95 are projected to recover to 1.7 billion bushels, an increase from the 1993/94 level of 850 million bushels. Stocks held in the Farmer Owned Reserve (FOR) program are projected to be 150 million bushels by the end of the 1994/95 marketing year and 350 million bushels by the end of the following marketing year. With a return to normal weather, ending stocks are generally low and remain below 1.6 billion bushels throughout the projection period.
- With record high production in 1994/95, season average corn **prices** are projected to decrease to \$2.15 per bushel. Prices are projected to recover in 1995/96 with a 7.5 percent ARP rate and lower production. Given the assumed program management strategy, prices remain between \$2.11 and \$2.38 per bushel each year thereafter.
- Record yields contributed to sharply higher participant **net returns** over variable costs in 1994/95. Strengthening prices and increasing yields maintain net returns at relatively stable levels throughout the baseline.

|                       | 93/94     | 94/95  | 95/96  | 96/97  | 97/98  | 98/99       | 99/00     | 00/01  | 01/02  | 02/03  | 03/04  |
|-----------------------|-----------|--------|--------|--------|--------|-------------|-----------|--------|--------|--------|--------|
| Program               | <br>      |        |        |        | (      | Percent)    | 1         |        |        |        |        |
| ARP Rate              | 10.0      | 0.0    | 7.5    | 5.0    | 5.0    | 5.0         | 5.0       | 2.5    | 2.5    | 0.0    | 0.0    |
| NFA Rate              | 15.0      | 15.0   | 15.0   | 15.0   | 15.0   | 15.0        | 15.0      | 15.0   | 15.0   | 15.0   | 15.0   |
| Participation Rate    | 81.3      | 81,6   | 82.3   | 80.9   | 81.4   | 82.6        | 81.4      | 81.7   | 81.2   | 80.8   | 80.8   |
| Area                  |           | •      |        |        | (Mi    | llion Acres | )         |        |        |        |        |
| Base Area             | 81.8      | 81.5   | 81.5   | 81.5   | 82.1   | 82.2        | ,<br>82.4 | 82.5   | 82.5   | 82.5   | 82.6   |
| ARP, PLD, 0-92/85     | 10.6      | 2.4    | 7.9    | 5.8    | 6.0    | 6.4         | 6.1       | 4.6    | 4.5    | 2.7    | 2.8    |
| CRP Idled             | 4.3       | 4.3    | 4.3    | 4.3    | 3.7    | 3.5         | 3.4       | 3.3    | 3.2    | 3.2    | 3.1    |
| Net Flexed Area       | -3.0      | -4.3   | -3.4   | -2.9   | -3.1   | -3.4        | -3.2      | -3.2   | -3.2   | -3.2   | -3.3   |
| Payment Planted       | 46.0      | 53 7   | 48.6   | 49.7   | 50.2   | 50.8        | 50.3      | 52.2   | 51.9   | 53.4   | 53.3   |
| Planted Area          | 73.2      | 79.2   | 75.8   | 79.1   | 79.1   | 78.2        | 79.4      | 80.9   | 80.9   | 82.9   | 82.4   |
| Harvested Area        | 62.9      | 72.9   | 68.7   | 71.7   | 71.7   | 70.9        | 72.0      | 73.4   | 73.5   | 75.3   | 74.8   |
| Viold                 |           |        |        |        | (Buet  | ols nor Ar  |           |        |        |        |        |
| Actual                | 100.7     | 138.6  | 126.0  | 126.5  | 128.0  | 120 R       | 131 0     | 131 0  | 1337   | 13/ 2  | 135.8  |
| Program               | 100.7     | 105.5  | 120.0  | 120.5  | 128.0  | 105.5       | 105.5     | 101.9  | 105.5  | 104.2  | 105.5  |
| Ū                     |           |        |        |        | (K.4)1 | ion Duchel  |           |        |        |        |        |
| Quesh                 | 0.470     | 40.000 | 40.000 | 40 540 |        | AO 700      | S)        | 44 404 | 44 000 | 14 604 | 44 704 |
|                       | 8,470     | 10,958 | 10,300 | 10,549 | 10,727 | 10,733      | 10,901    | 11,101 | 11,320 | 11,004 | 11,724 |
| Beginning Stocks      | <br>2,113 | 850    | 1,700  | 1,475  | 1,541  | 1,510       | 1,404     | 1,487  | 1,520  | 1,490  | 1,000  |
| Production            | 6,336     | 10,103 | 8,661  | 9,068  | 9,180  | 9,211       | 9,431     | 9,689  | 9,803  | 10,101 | 10,163 |
| Imports               | 21        | 5      | 5      | 5      | 5      | 5           | 5         | 5      | 5      | 5      | 5      |
| Domestic Use          | 6,292     | 7,300  | 7,027  | 7,180  | 7,343  | 7,342       | 7,446     | 7,627  | 7,726  | 7,859  | 7,909  |
| Feed, Residual        | 4,704     | 5,604  | 5,300  | 5,383  | 5,470  | 5,417       | 5,459     | 5,584  | 5,632  | 5,701  | 5,702  |
| Fuel Alcohol          | 470       | 527    | 558    | 600    | 642    | 681         | 721       | 760    | 798    | 837    | 875    |
| HFCS                  | 435       | 460    | 452    | 464    | 479    | 481         | 488       | 494    | 497    | 505    | 507    |
| Seed                  | 20        | 19     | 20     | 20     | 20     | 21          | 21        | 21     | 22     | 22     | 22     |
| Food, Other           | 663       | 691    | 696    | 712    | 732    | 742         | 756       | 768    | 778    | 793    | 803    |
| Exports               | 1,328     | 1,958  | 1,864  | 1,828  | 1,867  | 1,927       | 1,968     | 2,034  | 2,104  | 2,190  | 2,295  |
| Total Use             | 7,620     | 9,258  | 8,891  | 9,007  | 9,211  | 9,268       | 9,414     | 9,661  | 9,831  | 10,049 | 10,204 |
| Ending Stocks         | 850       | 1,700  | 1,475  | 1,541  | 1,516  | 1,464       | 1,487     | 1,520  | 1,498  | 1,555  | 1,519  |
| FOR, Special Program  | 119       | 150    | 350    | 175    | 0      | 0           | 0         | 0      | 0      | 0      | 0      |
| CCC Inventory         | 45        | 43     | 43     | 42     | 41     | 40          | 40        | 40     | 40     | 40     | 40     |
| 9-Month Loan          | 77        | 480    | 241    | 277    | 322    | 308         | 313       | 328    | 316    | 342    | 332    |
| "Free" Stocks         | 609       | 1,027  | 841    | 1,048  | 1,153  | 1,117       | 1,134     | 1,152  | 1,142  | 1,174  | 1,147  |
| Prices and Returns    |           |        |        |        |        | (Dollars)   |           |        |        |        |        |
| Farm Price/bu.        | 2.50      | 2.15   | 2.31   | 2,24   | 2.11   | 2.21        | 2.22      | 2.25   | 2.32   | 2.29   | 2.38   |
| Loan Rate/bu.         | 1.72      | 1.89   | 1.83   | 1.84   | 1.80   | 1.80        | 1.78      | 1.80   | 1.80   | 1.80   | 1.82   |
| Target Price/bu.      | 2.75      | 2.75   | 2.75   | 2.75   | 2.75   | 2.75        | 2.75      | 2.75   | 2.75   | 2.75   | 2.75   |
| FOB Gulf Price/mt     | 116.99    | 98.05  | 104.64 | 101.81 | 96.34  | 100.55      | 100.74    | 102.05 | 105.25 | 104.05 | 107.50 |
| Variable Expenses/a   | 140.41    | 151.63 | 156 72 | 156.96 | 157.80 | 160.96      | 164.89    | 169.04 | 173.15 | 177.47 | 182.33 |
| Partic, Returns/a     | 125.57    | 200 28 | 160 24 | 163 16 | 160.90 | 165 40      | 164 15    | 168.06 | 170 48 | 171 36 | 173.86 |
| Nonpartic. Returns/a. | 111.35    | 146.86 | 134.19 | 126.64 | 112.90 | 126.38      | 125.46    | 127.54 | 136.69 | 130.52 | 140.25 |
|                       |           |        |        |        |        |             |           |        |        |        |        |

U.S. Corn Supply and Utilization

## **U.S. Sorghum**

- Sorghum planted area fell to 9.8 million acres in 1994/95 as increases in the Northern Plains were more than offset by declines in the Southern Plains and Corn Belt. Acreage remains relatively stable in 1995/96 at 9.9 million acres. As a portion of the CRP contracts are not extended, planted area expands to 11.4 million acres by the end of the baseline.
- Net acreage flexed out of sorghum is projected to increase to 0.4 million acres in 1995/96. On average, 0.3 million acres per year are projected to flex out of sorghum and into other uses in each year after 1996/97.
- Favorable growing conditions in the Northern and Southern plains caused average sorghum yields to rise to 73.0 bushels per acre in 1994/95. Sorghum yields are projected to reach 68.4 bushels per acre by 2003/04, a growth rate of less than 0.5 percent per year. This assumes normal temperatures and rainfall in the future.
- With increased competition from corn, sorghum feed use is projected to fall to 402 million bushels in 1994/95. Feed use expands slowly through 1999/2000, and then remains relatively stable thereafter.
- Greater competition from corn for use in Mexican feed rations decreases U.S. sorghum exports to that country throughout the baseline, making export growth very modest. Exports of U.S. sorghum are projected to be 218 million bushels in 1994/95 and 249 million bushels by 2003/04.

• Increased production helped boost sorghum ending stocks to 75 million bushels in 1994/95. Stocks held in the Farmer Owned Reserve (FOR) program are projected to be 10 million bushels by the end of the 1994/95 marketing year and doubled to 20 million by the end of the 1995/96 marketing year. With a return to normal weather, ending stocks remain below 100 million bushels throughout the projection period.

• With increased production in 1994/95, season average sorghum **farm prices** fell to \$2.02 per bushel. Prices are projected to increase in 1995/96 on lower production. Sorghum prices maintain a fairly constant relationship to corn prices throughout the baseline.

Program participant net returns over variable costs rebounded to \$95.35 per acre due to higher yields in 1994/95.
 Over the projection period, nonparticipant net returns increase somewhat while participant net returns generally decline with frozen target prices and program yields.

|                       |         | 93/94  | 94/95 | 95/96  | 96/97  | 97/98  | 98/99        | 99/00    | 00/01  | 01/02  | 02/03    | 03/04  |
|-----------------------|---------|--------|-------|--------|--------|--------|--------------|----------|--------|--------|----------|--------|
| Program               |         |        |       |        |        |        | Percent)     |          |        |        |          |        |
| ARP Rate              |         | 5.0    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0          | 0.0      | 0.0    | 0.0    | 0.0      | 0.0    |
| NFA Rate              |         | 15.0   | 15.0  | 15.0   | 15.0   | 15.0   | 15.0         | 15.0     | 15.0   | 15.0   | 15.0     | 15.0   |
| Participation Rate    |         | 81.6   | 81.1  | 81.7   | 77.3   | 79.0   | 81.8         | 80.0     | 79.7   | 78.9   | 77.4     | 77.4   |
| Area                  |         |        |       | ,      | · .    | (Mil   | lion Acres)  | <br>     |        |        |          |        |
| Base Area             |         | 13.5   | 13.5  | 13.5   | 13.5   | 14.0   | 14.3         | 14.5     | 14.5   | 14.6   | 14.6     | 14.6   |
| ARP, PLD, 0-92/85     |         | 2.2    | 1.6   | 1.8    | 1.6    | 1.7    | 1.9          | 1.9      | 1.9    | 1.8    | 1.8      | 1.8    |
| CRP Idled             |         | 2.5    | 2.5   | 2.5    | 2.5    | 1.8    | 1.4          | 1.2      | 1.1    | 1.1    | 1.1      | 1.0    |
| Net Flexed Area       | · · · . | -0.3   | -0.3  | -0.4   | -0.2   | -0.3   | -0.3         | -0.3     | -0.3   | -0.3   | -0.3     | -0.3   |
| Payment Planted       |         | 6.1    | . 6,1 | 6.7    | 6.4    | 6.9    | 7.2          | 7.2      | 7.2    | 7.1    | - 7.0.   | 7.0    |
| Planted Area          |         | 9.9    | 9.8   | 9.9    | 10.5   | 10.9   | 10.9         | 11.3     | 11.3   | 11.3   | 11.4     | 11.4   |
| Harvested Area        |         | 8.9    | 9.0   | 9.0    | 9.6    | 9.9    | 9.9          | 10.2     | 10.3   | 10.3   | 10.3     | 10.3   |
| Yield                 |         |        |       |        |        | (Bush  | iels per Aci | re)      |        |        |          |        |
| Actual                |         | 59.9   | 73.0  | 66.7   | 66.6   | 66.9   | 67.2         | 67.4     | 67.7   | 67.9   | 68.2     | 68.4   |
| Program               |         | 59.0   | 59.2  | 59.2   | 59.2   | 59.2   | 59.2         | 59.2     | 59.2   | 59.2   | 59.2     | 59.2   |
|                       |         |        |       |        |        | (Milli | on Bushels   | 5)       |        |        |          |        |
| Supply                |         | 709    | 703   | 673    | 714    | 750    | 756          | ,<br>775 | 784    | 789    | 794      | 799    |
| Beginning Stocks      |         | 175    | 48    | 75     | 76     | 86     | 90           | 87       | 89     | 91     | 89       | 91     |
| Production            | · · ·   | 534    | 655   | 597    | 638    | 664    | 666          | 689      | 695    | 698    | 705      | 708    |
| Imports               |         | 0      | 0     | 0      | 0      | 0      | 0            | 0        | 0      | 0      | 0        | 0      |
| Domestic Use          |         | 460    | 410   | 386    | 415    | 441    | 450          | 463      | 464    | 462    | 461      | 460    |
| Feed Residual         |         | 453    | 402   | 378    | 407    | 433    | 441          | 455      | 455    | 454    | 452      | 451    |
| Food, Industry        |         | 6      | 7     | 7      | 7.     | 7 .    | 7            | 7        | 7      | 7      | 7        | 7      |
| Seed                  | · ·     | 1      | 1     | . 1    | 2      | 2      | 2            | 2        | 2      | 2      | 2        | 2      |
| Exports               |         | 202    | 218   | 211    | 213    | 219    | 220          | 222      | 230    | 237    | 242      | 249    |
| Total Use             |         | 662    | 628   | 597    | 628    | 660    | 669          | 686,     | 694    | 700    | 703      | 709    |
| Ending Stocks         |         | 48     | 75    | 76     | 86     | 90     | 87           | 89       | 91     | 89     | ·· 91 ·· | 91     |
| FOR. Special Program  |         | - 4    | 10    | 20     | 10     | 0      | 0            | 0        | 0      | 0      | 0        | . 0    |
| CCC Inventory         |         | 1      | 1     | 0      | 0      | Ō      | 0            | 0        | 0      | 0      | 0        | 0      |
| 9-Month Loan          |         | 1      | 20    | 13     | 15     | 20     | 18           | 16       | 16     | 14     | 14       | 13     |
| "Free" Stocks         |         | 42     | 44    | 43     | 61     | 70     | 69           | 73       | 75     | 76     | 77       | 78     |
| Prices and Returns    |         |        |       |        |        | (      | Dollars)     |          |        |        |          | *      |
| Farm Price/bu.        |         | 2.31   | 2.02  | 2.23   | 2.14   | 1.98   | 2.07         | 2:09     | 2.12   | 2.21   | 2.21     | 2.29   |
| Loan Rate/bu.         |         | 1.63   | 1.80  | 1.74   | 1.75   | 1.71   | 1.71         | 1.69     | 1.71   | 1.71   | 1.71     | 1.73   |
| Target Price/bu.      |         | 2.61   | 2.61  | 2.61   | 2.61   | 2.61   | 2.61         | 2.61     | 2.61   | 2.61   | 2.61     | 2.61   |
| FOB Gulf Price/mt     |         | 109.24 | 96.35 | 105.49 | 101.56 | 94.60  | 98.71        | 99.32    | 100.90 | 104.81 | 104.74   | 108.30 |
| Variable Expenses/a.  |         | 78.32  | 82.06 | 86.53  | 86.57  | 87.14  | 88.52        | 90.21    | 92.03  | 93.82  | 95.74    | 97.88  |
| Partic. Returns/a.    |         | 74.65  | 95.35 | 81.39  | 79.78  | 77.13  | 78.05        | 76.91    | 76.25  | 76.53  | 75.19    | 75.04  |
| Nonpartic. Returns/a. |         | 60.07  | 65.62 | 61.95  | 55.92  | 45.43  | 50.98        | 50.52    | 51.65  | 56.32  | 54.90    | 58.76  |
|                       |         |        |       |        |        |        |              |          |        |        |          |        |

# U.S. Sorghum Supply and Utilization

## **U.S. Barley**

- Weaker prices relative to wheat contributed to a 0.6 million acre decline in **barley planted area** in 1994/95. With stronger prices, area peaks at 8.7 million acres by 1997/98.
- A net total of approximately 0.6 million acres was flexed out of barley in 1994/95. Net flex acreage remains fairly constant throughout the projection period, ranging from 0.5 to 0.7 million acres.
- Barley yields in 1994/95 stood at 56.1 bushels per acre. Barley yields go up slowly during the baseline period, reaching 59.7 bushels per acre by 2003/04.
- Barley imports are projected to remain high at 60 million bushels in 1994/95. Import levels then fall to 30 million bushels in 1995/96 and continue at that level for the remainder of the baseline period.

Barley total domestic use is projected to increase throughout the projection period. Feed use will fluctuate slightly
while food uses will grow modestly. The increases are brought about by increased population and expanding livestock
numbers as per-capita consumption remains relatively flat.

- U.S. barley exports fell off again in 1994/95 to 62 million bushels, the lowest amount since 1985/86. Despite low U.S. prices, exports generally decline after 1997/98 due to GATT constraints on EEP.
- Barley ending stocks were lower in 1994/95 at 111 million bushels due to lower production and higher prices. Stocks
  are projected to remain tight in 1995/96 and not rebuild significantly during the baseline period.
- The 1994/95 U.S. season average barley farm prices are projected at \$2.02 per bushel. Barley prices stay relatively weak given the poor export situation and the current program management strategy.
- Program participant net returns over variable costs fell to \$60.91 per acre in 1994/95 due to lower yields and higher costs. Yield increases are more than offset by cost-of-production increases through the remainder of the baseline resulting in lower participant net returns.

|                          | 93/94  | 94/95  | 95/96  | 96/97  | 97/98  | 98/99      | 99/00     | 00/01  | 01/02  | 02/03  | 03/04  |
|--------------------------|--------|--------|--------|--------|--------|------------|-----------|--------|--------|--------|--------|
| Program                  |        |        |        |        |        | Percent)   |           |        |        |        |        |
| ARP Rate                 | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0        | 0.0       | 0.0    | 0.0    | 0.0    | 0.0    |
| NFA Rate                 | 15.0   | 15.0   | 15.0   | 15.0   | 15.0   | 15.0       | 15.0      | 15.0   | 15.0   | 15.0   | 15.0   |
| Participation Rate       | 82.5   | 83.8   | 82.5   | 80.1   | 80.4   | 82.3       | 82.3      | 82.3   | 82.1   | 81.6   | 81.4   |
| Area                     |        |        |        |        | (Mil   | lion Acres | )         |        |        |        |        |
| Base Area                | 10.8   | 10.7   | 10.7   | 10.7   | 11.3   | 11.8       | ,<br>12.0 | 12.3   | 12.3   | 12.3   | 12.3   |
| ARP, PLD, 0-92/85        | 2.5    | 2.7    | 2.5    | 2.0    | 2.2    | 2.8        | 3.0       | 3.2    | 3.2    | 3.2    | 3.2    |
| CRP Idled                | 2.8    | 2.8    | 2.8    | 2.8    | 2.0    | 1.5        | 1.1       | 0.9    | 0.8    | 0.8    | 0.8    |
| Net Flexed Area          | -0.5   | -0.6   | -0.6   | -0.5   | -0.5   | -0.6       | -0.6      | -0.6   | -0.7   | -0.7   | -0.7   |
| Payment Planted          | 4.6    | 4.4    | 4.7    | 5.0    | 5.2    | 5.1        | 5.1       | 5.1    | 5.0    | 5.0    | 5.0    |
| Planted Area             | 7.8    | 7.2    | 7.4    | 8.2    | 8.7    | 8.5        | 8.5       | 8.5    | 8.4    | 8.4    | 8.4    |
| Harvested Area           | 6.8    | 6.7    | 6.8    | 7.5    | 8.0    | 7.8        | 7.9       | 7.8    | 7.7    | 7.8    | 7.7    |
| Yield                    |        |        |        |        | (Bush  | els per Ac | re)       |        |        |        |        |
| Actual                   | 58.6   | 56.1   | 57.6   | 57.7   | 57.8   | 58.2       | 58.5      | 58.8   | 59.1   | 59.4   | 59.7   |
| Program                  | 46.9   | 47.1   | 47.1   | 47.1   | 47.1   | 47.1       | 47.1      | 47.1   | 47.1   | 47.1   | 47.1   |
|                          |        |        |        |        | (Milli | on Bushel  | s)        |        |        |        | •      |
| Supply                   | 620    | 574    | 533    | 563    | 596    | 594        | 597       | 598    | 594    | 597    | 597    |
| Beginning Stocks         | 151    | 139    | 111    | 98     | 102    | 110        | 107       | 107    | 109    | 106    | 107    |
| Production               | 398    | 375    | 392    | 435    | 464    | 453        | 459       | 461    | 455    | 461    | 460    |
| Imports                  | 71     | 60     | 30     | 30     | 30     | 30         | 30        | 30     | 30     | 30     | 30     |
| Domestic Use             | 416    | 402    | 381    | 407    | 426    | 429        | 435       | 438    | 439    | 444    | 447    |
| Feed Residual            | 241    | 226    | 202    | 224    | 241    | 242        | 246       | 246    | 245    | 249    | 250    |
| Food Industry            | 163    | 163    | 165    | 168    | 170    | 173        | 175       | 177    | 179    | 181    | 183    |
| Seed                     | 13     | 13     | 14     | 15     | 14     | 14         | 14        | 14     | 14     | 14     | 14     |
| Exports                  | 66     | 62     | 54     | 55     | 59     | 58         | 54        | 51     | 50     | 47     | 45     |
| Total Use                | 482    | 463    | 435    | 462    | 485    | 487        | 490       | 489    | 488    | 490    | 492    |
| Ending Stocks            | 139    | 111    | 98     | 102    | 110    | 107        | 107       | 109    | 106    | 107    | 105    |
| FOR. Special Program     | 7      | 5      | 10     | 5      | 0      | 0          | 0         | 0      | 0      | 0      | 0      |
| CCC Inventory            | 5      | 5      | 0      | 0      | 0      | 0          | - 0       | 0      | 0      | 0      | 0      |
| 9-Month Loan             | 14     | 15     | 16     | 18     | 21     | 21         | 20        | 21     | 20     | 20     | 19     |
| "Free" Stocks            | 113    | 86     | 72     | 78     | 89     | 87         | 87        | 88     | 86     | 87     | 85     |
| Prices and Returns       |        |        |        |        | (      | Dollars)   |           |        |        |        |        |
| Farm Price/bu.           | 1.99   | 2.02   | 2.21   | 2.19   | 2.03   | 2.03       | 2.04      | 2.06   | 2.11   | 2.13   | 2.20   |
| Loan Rate/bu.            | 1.40   | 1.54   | 1.49   | 1.50   | 1.47   | 1.47       | 1.45      | 1.46   | 1.46   | 1.46   | 1.48   |
| Target Price/bu.         | 2.36   | 2.36   | 2.36   | 2.36   | 2.36   | 2.36       | 2.36      | 2.36   | 2.36   | 2.36   | 2.36   |
| FOB Pacific Northwest/mt | 115.53 | 117.17 | 126.07 | 124.92 | 117.65 | 117.59     | 117.89    | 118.65 | 121.22 | 122.41 | 125.40 |
| Variable Expenses/a.     | 67.41  | 69.88  | 72.34  | 72.58  | 72.70  | 74.00      | 75.78     | 77.61  | 79.37  | 81.36  | 83.59  |
| Partic. Returns/a        | 70.47  | 60.91  | 64.60  | 63.99  | 61.26  | 60.76      | 59.57     | 58.58  | 58.51  | 57.48  | 57.12  |
|                          | F2 0F  | 47.40  |        |        |        |            |           | . – –  |        |        |        |

# U.S. Barley Supply and Utilization

#### U.S. Oats

- 0 percent ARP rates for all crops except cotton reduced the use of oats as a cover crop and thus reduced oats **planted area** to 6.6 million acres in 1994/95. Despite the drop in plantings, **harvested area** rose to 4.0 million acres. For the remainder of the baseline, planted area averages 7.0 million acres with approximately one-half being harvested.
- Oat yields benefited from the favorable weather in the 1994/95 growing season, achieving a yield of 57.2 bushels per acre. Yields show almost no growth in the baseline. Trend toward yield increases is offset by the effect of higher harvested acreage as all of the oat CRP land returns to production.
- Weaker prices and increased production cause **net imports** of oats to decline to 100 million bushels in 1994/95. Exports of 3 million bushels per year and imports of between 89 and 95 million bushels keep net imports between 86 and 92 million bushels over the baseline period.
- Oat feed use is projected to be 201 million bushels in 1994/95 and then declines during the rest of the baseline. This feed use path coupled with slowly growing food use produces flat domestic use.
- Food use of oats rises by as much as 3 million bushels per year. This increase is brought about both by population growth and increases in per-capita consumption.
- Oat prices were weaker in 1994/95 due to higher production, falling to \$1.23 per bushel. Prices rise to \$1.29 in 1995/96 and stay in the \$1.31 to \$1.42 range throughout the remainder of the baseline.
- Participant **net returns** over variable costs in 1994/95 are projected at \$46.67. Net returns remain stable through 1996/97 and decrease thereafter. Frozen target prices and program yields cause net returns to fall to \$34.65 per acre by 2003/04.

|                       | 93/94 | 94/95           | 95/96 | 96/97 | 97/98   | 98/99       | 99/00 | 00/01 | 01/02  | 02/03     | 03/04  |
|-----------------------|-------|-----------------|-------|-------|---------|-------------|-------|-------|--------|-----------|--------|
| Program               |       |                 |       |       | (F      | Percent)    |       | · · · | ······ | · · · · · | *****  |
| ARP Rate              | 0.0   | 0.0             | 0.0   | 0.0   | 0.0     | 0.0         | 0.0   | 0.0   | 0.0    | 0.0       | 0.0    |
| NFA Rate              | 15.0  | 15.0            | 15.0  | 15.0  | 15.0    | 15.0        | 15.0  | 15.0  | 15.0   | 15.0      | 15.0   |
| Participation Rate    | 45.7  | 39.8            | 46.3  | 43.1  | 40.2    | 42.5        | 42.8  | 42.3  | 41.4   | 40.3      | 40.2   |
| Area                  |       |                 |       |       | (Mill   | lion Acres) |       |       | ÷ 4    |           |        |
| Base Area             | 7.1   | 6.8             | 6.8   | 6.8   | 7.2     | 7.5         | 7.7   | 7.9   | 7.9    | 7.9       | 7.9    |
| ARP, PLD, 0-92/85     | 0.8   | 0.6             | 0.8   | 0.7   | 0.7     | 0.8         | 0.8   | 0.8   | 0.8    | 0.8       | 0.8    |
| CRP Idled             | 1.4   | 1.4             | 1.4   | 1.4   | 0.9     | 0.5         | 0.3   | 0.1   | 0.1    | 0.0       | 0.0    |
| Net Flexed Area       | -0.3  | -0.3            | -0.3  | -0.2  | -0.2    | -0.3        | -0.3  | -0.3  | -0.3   | -0.3      | -0.3   |
| Payment Planted       | 1.4   | 1.1             | 1.4   | 1.3   | 1.3     | 1.4         | 1.5   | 1.5   | 1.4    | 1.4       | 1.4    |
| Planted Area          | 79    | 66              | 72    | 6.9   | 72      | 72          | 72    | 7.0   | 7.0    | 69        | 6.9    |
| Harvested Area        | 3.8   | 4.0             | 3.6   | 3.4   | 3.6     | 3.6         | 3.6   | 3.7   | 3.7    | 3.7       | 3.7    |
| Yield                 |       |                 |       |       | (Bush   | els ner Ac  | re)   |       |        |           |        |
| Actual                | 54 4  | 57.2            | 59.0  | 59 1  | 59.2    | 59 1        | 59.0  | 59.0  | 59.2   | 59.2      | 59.3   |
| Program               | 48.7  | 48.6            | 48.6  | 48.6  | 48.6    | 48.6        | 48.6  | 48.6  | 48.6   | 48.6      | 48.6   |
|                       |       |                 |       |       | (Millic | on Bushels  | 5)    |       |        |           |        |
| Supply                | 427   | 437             | 414   | 398   | 409     | 415         | 414   | 414   | 415    | 416       | 416    |
| Beginning Stocks      | 113   | 106             | 109   | 100   | 99      | 106         | 107   | 106   | 106    | 106       | 106    |
| Production            | 207   | 230             | 212   | 203   | 215     | 216         | 215   | 217   | 218    | 220       | 221    |
| Imports               | 107   | 101             | 94    | 95    | 94      | 93          | 92    | 92    | 91     | 90        | 89     |
| Domestic Use          | 318   | 328             | 311   | 296   | 300     | 305         | 305   | 306   | 306    | 306       | 307    |
| Feed, Residual        | 193   | 201             | 183   | 164   | 166     | 169         | 168   | 166   | 165    | . 163     | 162    |
| Food. Industry        | 109   | 111             | 113   | 115   | 118     | 120         | 122   | 124   | 126    | 128       | 130    |
| Seed                  | 16    | 16              | 15    | 16    | 16      | 16          | 16    | 16    | 15     | 15        | 15     |
| Exports               | 3     | . 1             | 3     | 3     | 3       | 3           | 3     | 3     | 3      | 3         | 3      |
| Total Use             | 321   | 329             | 314   | 299   | 303     | 308         | 308   | 309   | 309    | 309       | 310    |
| Ending Stocks         | 106   | 109             | 100   | 99    | 106     | 107         | 106   | 106   | 106    | 106       | 107    |
| FOR, Special Program  | . 0   | 0               | 0     | 0     | 0       | 0           | 0     | 0     | 0      | 0         | 0      |
| CCC Inventory         | 0     | 0               | 0     | 0     | 0       | 0           | 0     | 0     | 0      | 0         | 0      |
| 9-Month Loan          | 1     | 0               | 0     | 0     | 0       | 0           | 0     | 0     | 0      | 0         | 0      |
| "Free" Stocks         | 105   | 10 <del>9</del> | 100   | 99    | 106     | 107         | 106   | 106   | 106    | 106       | 107    |
| Prices and Returns    |       |                 |       |       | (       | Dollars)    |       |       |        |           |        |
| Farm Price/bu.        | 1.36  | 1.23            | 1.29  | 1.37  | 1.32    | 1.31        | 1.33  | 1.36  | 1.40   | 1.40      | : 1.42 |
| Loan Rate/bu.         | 0.88  | 0.97            | 0.94  | 0.95  | 0.93    | 0.93        | 0.92  | 0.92  | 0.92   | 0.92      | 0.94   |
| Target Price/bu.      | 1.45  | 1.45            | 1.45  | 1.45  | 1.45    | 1.45        | 1.45  | 1.45  | 1.45   | 1.45      | 1.45   |
| Variable Expenses/a.  | 49.01 | 51.25           | 53.07 | 53.26 | 53.57   | 54.64       | 56.04 | 57.33 | 58.53  | 60.17     | 61.83  |
| Partic. Returns/a.    | 46.80 | 46.67           | 44.97 | 45.68 | 43.86   | 42.07       | 40.36 | 39.03 | 38.21  | 36.40     | 34.65  |
| Nonpartic. Returns/a. | 40.17 | 34.49           | 38.52 | 42.17 | 38.29   | 36.42       | 35.55 | 35.32 | 36.00  | 34.48     | 33.31  |

# U.S. Oats Supply and Utilization

# U.S. Hay

- Hay harvested area fell to 58.7 million acres in 1994/95, its lowest level in recent decades. As a portion of CRP contracts expire and hay prices remain relatively stable, harvested area expands to 61.8 million acres by 2000/01. As prices weaken, area falls to 61.3 million acres by the end of the projection period.
- Hay yields rose to 2.56 tons per acre in 1994/95, a new record. Yields are projected to drop in 1995/96 and remain at or near that level throughout the baseline. This figure assumes normal weather.
- Hay disappearance is projected to increase in 1994/95 to 149.8 million tons. Use shows modest growth every year of the baseline.
- Hay ending stocks in 1994/95 are projected to increase to 23.0 million tons with weaker prices and increased supply. After remaining relatively stable through 1998/99, stocks show modest increases thereafter in response to lower prices.
- The U.S. average all-hay price fell to \$78.15 per ton in 1994/95. Prices decline during the baseline period with the alfalfa hay price averaging more than \$6.50 higher than all hay prices.

|                         | 93/94 | 94/95 | 95/96 | 96/97 | 97/98 | 98/99       | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 |
|-------------------------|-------|-------|-------|-------|-------|-------------|-------|-------|-------|-------|-------|
|                         |       |       |       |       | (Mill | lion Acres) |       |       |       |       |       |
| Area                    | 59.7  | 58.7  | 59.8  | 60.3  | 60.9  | 61.4        | 61.7  | 61.8  | 61.6  | 61.4  | 61.3  |
|                         |       |       |       |       | (Ton  | s per Acre  | )     |       |       |       |       |
| Yield                   | 2.46  | 2.56  | 2.52  | 2.52  | 2.51  | 2.51        | 2,52  | 2.52  | 2.54  | 2.55  | 2.57  |
|                         |       |       |       |       | (Mil  | llion Tons) |       |       |       |       |       |
| Supply                  | 167.9 | 172.8 | 173.5 | 174.5 | 175.6 | 176.9       | 178.1 | 179.4 | 180.9 | 181.5 | 182.1 |
| Production              | 146.8 | 150.1 | 150.5 | 151.7 | 153.0 | 154.2       | 155.2 | 155.9 | 156.3 | 156.7 | 157.2 |
| Beginning Stocks        | 21.1  | 22.7  | 23.0  | 22.8  | 22.6  | 22.7        | 22.9  | 23.5  | 24.6  | 24.8  | 24.9  |
| Disappearance           | 145.3 | 149.8 | 150.7 | 152.0 | 152.9 | 154.0       | 154.5 | 154.8 | 156.1 | 156.7 | 157.3 |
| Ending Stocks           | 22.7  | 23.0  | 22.8  | 22.6  | 22.7  | 22.9        | 23.5  | 24.6  | 24.8  | 24.9  | 24.7  |
| Prices                  |       |       |       |       | (     | Dollars)    |       |       |       |       |       |
| All-Hay (crop year)     | 81,60 | 78.15 | 76.15 | 77.07 | 78.31 | 79.75       | 77.63 | 73.18 | 70.85 | 69.08 | 69.73 |
| Alfalfa (calendar year) | 85.73 | 87.08 | 83.86 | 83.41 | 84.68 | 86.23       | 85.05 | 80.87 | 77.56 | 75.40 | 75.31 |

## U.S. Hay Supply and Utilization

#### 60 / U.S. Crops

#### **U.S. Soybeans and Soybean Products**

- Soybean **planted area** rose in 1994/95 to 61.9 million acres and is projected to fall to 59.5 million acres in 1995/96 as prices weaken relative to corn and cotton. Land returning to production from the CRP and strong prices fuel increases in planted area during the baseline period. By 2003/04, planted area will reach 63.5 million acres.
- Net flex acres into soybeans continued to increase and reached 5.9 million acres in 1994/95. During the projection period, net flex area ranges from 4.4 to 5.2 million acres.
- Soybean yields reached a new record in 1994/95 at 41.9 bushels per acre, generating production of 2.56 billion bushels, also a record high. Assuming average rainfall and temperatures during the baseline period, yields increase by an average of 0.4 bushels per acre each year.
- With an increased crushing margin, soybean **crush use** is projected to expand to 1.36 billion bushels in 1994/95. After a decline in 1995/96, strong demand for soybean products, both in the United States and abroad, cause crush to increase steadily throughout the projection period.
- Soybean oil domestic use increases in 1994/95, reaching almost 13 billion pounds. With slow growth assumed for many competing fats and oils, domestic use continues to increase though 2003/04.
- Domestic soybean **meal use** rose to 26.3 million tons in 1994/95. Increases in livestock numbers during the projection period keep soybean meal use rising during the 1995/96 to 2003/04 period.
- Soybean exports expanded in 1994/95 to 790 million bushels due to lower U.S. prices and strong world demand. As prices recover in 1995/96, exports decline to 731 million bushels, but then show steady growth as the United States maintains trade share at approximately 66 percent.
- The season average farm **price** of soybeans dropped in 1994/95 to \$5.35 per bushel because of the record crop. Prices rebound to \$5.48 per bushel in 1995/96 due to smaller production and range from \$5.59 to \$6.12 over the 1995/96 to 2003/04 period.
- Soybean **net returns** over variable costs remain strong throughout the projection period as price and yield increases more than offset rising costs of production.

|                      | 93/94  | 94/95  | 95/96  | 96/97  | 97/98    | 98/99       | 99/00       | 00/01  | 01/02  | 02/03   | 03/04  |
|----------------------|--------|--------|--------|--------|----------|-------------|-------------|--------|--------|---------|--------|
| Area                 |        |        |        |        | (Mil     | lion Acres  | )           |        |        | · · · · |        |
| CRP Idled            | 42     | 42     | 4.2    | 42     | 37       | 3.5         | 33          | 32     | 32     | 3.2     | 3.1    |
| Net Flexed Area      | 4.7    | 5.9    | 4.7    | 4.4    | 4.8      | 5.2         | 5.0         | 5.1    | 5.0    | 5.0     | 5.2    |
| Planted Area         | 60.1   | 61.9   | 59.5   | 59.3   | 60.8     | 62.1        | 62,0        | 62.4   | 62.7   | 62.7    | 63.5   |
| Harvested Area       | 57.3   | 61.1   | 58.4   | 58.1   | 59.6     | 60,9        | 60.8        | 61.3   | 61.5   | 61.5    | 62.3   |
|                      |        |        |        |        | /Buch    | iole nor Ac | ro)         |        |        |         |        |
| Yield                | 32.6   | 41.9   | 35.7   | 36.3   | 36.5     | 36.8        | 37.4        | 37.8   | 38.3   | 38.8    | 39.1   |
| ·                    |        |        |        |        | /K 4:11: |             | -           |        |        |         |        |
| Supply               | 2 160  | 2 772  | 2 509  | 2 563  | 2 5 70   |             | 5)<br>7 636 | 2 667  | 2 604  | -2 711  | 2711   |
| Beginning Stocks     | 2,109  | 2,112  | 2,390  | 2,505  | 2,370    | 2,007       | 2,030       | 2,007  | 2,094  | 2,711   | 2,744  |
| Beginning Stocks     | 292    | 209    | 2 094  | 2 100  | 2 1 9 0  | 2 244       | 2 2 2 2 2   | 2 340  | 2 354  | 2 395   | 2 / 37 |
| Importe              | 1,071  | 2,000  | 2,004  | 2,109  | 2,100    | 2,244       | 2,213       | 2,510  | 2,004  | 2,303   | 2,407  |
| Impons               | U U    | 5      | 5      | 5      | 5        | 5           | 5           | 5      | 5      | 5       |        |
| Domestic Use         | 1.370  | 1.473  | 1.419  | 1.439  | 1,466    | 1,498       | 1.524       | 1,550  | 1,574  | 1,595   | 1,622  |
| Crush                | 1,273  | 1,359  | 1,314  | 1,335  | 1,362    | 1,394       | 1,419       | 1,445  | 1,468  | 1,488   | 1,514  |
| Seed                 | 97     | 114    | 106    | 104    | 104      | 104         | 105         | 106    | 106    | 107     | 107    |
| Exports              | 589    | 790    | 731    | 738    | 746      | 752         | 766         | 782    | 800    | 813     | 827    |
| Total Use            | 1,959  | 2,263  | 2,150  | 2,177  | 2,212    | 2,250       | 2,290       | 2,332  | 2,373  | 2,408   | 2,449  |
| Ending Stocks        | 209    | 509    | 448    | 385    | 358      | 357         | 346         | 335    | 321    | 303     | 295    |
| CCC Inventory        | 0      | 0      | 0      | 0      | 0        | 0           | 0           | 0      | · 0    | 0       | 0      |
| 9-Month Loan         | 10     | 43     | 35     | 33     | 39       | 42          | 41          | 39     | 36     | 33      | 32     |
| "Free" Stocks        | 199    | 466    | 413    | 352    | 319      | 315         | 305         | 296    | 285    | 270     | 263    |
| Prices and Returns   |        |        |        |        | · (      | (Dollars)   |             |        |        |         |        |
| Farm Price/bu.       | 6.40   | 5.35   | 5.48   | 5.67   | 5.63     | 5.59        | 5.67        | 5.75   | 5.89   | 6.06    | 6.12   |
| Loan Rate/bu         | 5.02   | 4.92   | 4.92   | 4.92   | 4.92     | 4.92        | 4.92        | 4.92   | 4.92   | 4.92    | 4.92   |
| FOB Gulf Price/mt    | 253.23 | 213.57 | 218.53 | 225.65 | 224.05   | 222.68      | 225.48      | 228.54 | 233.79 | 240.19  | 242.74 |
| Bean/Corn Ratio      | 2.57   | 2.49   | 2.38   | 2.54   | 2.67     | 2.54        | 2,56        | 2.57   | 2.54   | 2.65    | 2.59   |
| Variable Expenses/a. | 77.80  | 79.84  | 82.01  | 83.08  | 83.99    | 85.36       | 86.65       | 88.19  | 89.72  | 91.36   | 93.23  |
| Net Returns/a.       | 131.00 | 144.14 | 113.75 | 122.75 | 121.71   | 120.66      | 125.21      | 129.16 | 135.61 | 143.43  | 146.34 |
| 44% Meal Price/ton   | 180.53 | 150.80 | 160.98 | 166.95 | 166.00   | 167.93      | 171.80      | 178.95 | 185.01 | 189.41  | 194.66 |
| Oil Price/cwt        | 27.10  | 25.55  | 23.19  | 23.63  | 23.68    | 23.55       | 23.59       | 23.00  | 22.98  | 23.34   | 23.21  |
| Crushing Margin/bu.  | 0.87   | 1.06   | 0.94   | 0.94   | 0.97     | 1.04        | 1.06        | 1.08   | 1.09   | 1.06    | 1.11   |
|                      |        |        |        |        |          |             |             |        |        |         |        |

# U.S. Soybean Supply and Utilization

|                  | 93/94 * | 94/95  | 95/96  | 96/97  | 97/98  | 98/99      | 99/00  | 00/01  | 01/02  | 02/03  | 03/04  |
|------------------|---------|--------|--------|--------|--------|------------|--------|--------|--------|--------|--------|
|                  |         |        |        |        | (Mil   | lion Pound | s)     |        |        |        |        |
| Supply           | 15,529  | 16,218 | 15,870 | 16,154 | 16,452 | 16,812     | 17,135 | 17,451 | 17,746 | 18,003 | 18,316 |
| Beginning Stocks | 1,555   | 1,103  | 1,274  | 1,317  | 1,315  | 1,328      | 1,368  | 1,402  | 1,441  | 1,474  | 1,492  |
| Production       | 13,906  | 15,100 | 14,581 | 14,821 | 15,123 | 15,468     | 15,752 | 16,034 | 16,290 | 16,515 | 16,810 |
| Imports          | 68      | 15     | 15     | 15     | 15     | 15         | 15     | 15     | 15     | 15     | 15     |
| Domestic Use     | 12,896  | 12,993 | 13,183 | 13,281 | 13,437 | 13,627     | 13,788 | 14,009 | 14,161 | 14,257 | 14,421 |
| Exports          | 1,529   | 1,951  | 1,370  | 1,558  | 1,687  | 1,817      | 1,945  | 2,001  | 2,112  | 2,254  | 2,367  |
| Total Use        | 14,425  | 14,944 | 14,553 | 14,839 | 15,124 | 15,444     | 15,733 | 16,010 | 16,273 | 16,512 | 16,787 |
| Ending Stocks    | 1,103   | 1,274  | 1,317  | 1,315  | 1,328  | 1,368      | 1,402  | 1,441  | 1,474  | 1,492  | 1,529  |
| Prices           |         | ~      |        |        |        | (Dollars)  |        |        |        |        |        |
| Decatur/cwt      | 27.10   | 25.55  | 23.19  | 23.63  | 23.68  | 23.55      | 23.59  | 23.00  | 22.98  | 23.34  | 23.21  |
| Decatur/mt       | 597.45  | 563.22 | 511.17 | 520.93 | 522.02 | 519.21     | 520.08 | 507.14 | 506.57 | 514.63 | 511.78 |

# U.S. Soybean Oil Supply and Utilization

| personal contraction of |               |        |        |               |               |               |        |        |               |               |               |
|-------------------------|---------------|--------|--------|---------------|---------------|---------------|--------|--------|---------------|---------------|---------------|
| · .                     | 93/94         | 94/95  | 95/96  | 96/97         | 97/98         | 98/99         | 99/00  | 00/01  | 01/02         | 02/03         | 03/04         |
|                         |               |        |        |               | (1            | ,000 Tons)    |        |        |               |               |               |
| Supply                  | 30,686        | 32,456 | 31,757 | 32,266        | 32,907        | 33,655        | 34,266 | 34,875 | 35,424        | 35,909        | 36,546        |
| Production              | 204<br>30,417 | 32,246 | 31,396 | 293<br>31,913 | 265<br>32,562 | 290<br>33,305 | 33,916 | 34,524 | 200<br>35,075 | 290<br>35,559 | 295<br>36,194 |
| Imports                 | 65            | 60     | 60     | 60            | 60            | 60            | 60     | 60     | 60            | 60            | 60            |
| Domestic Use            | 25,161        | 26,330 | 26,474 | 26,952        | 27,305        | 27,844        | 28,316 | 28,909 | 29,346        | 29,609        | 29,986        |
| Exports                 | 5,375         | 5,825  | 4,990  | 5,028         | 5,312         | 5,521         | 5,661  | 5,677  | 5,788         | 6,008         | 6,266         |
| Total Use               | 30,536        | 32,155 | 31,464 | 31,981        | 32,617        | 33,365        | 33,976 | 34,586 | 35,134        | 35,616        | 36,252        |
| Ending Stocks           | 150           | 301    | 293    | 285           | 290           | 290           | 290    | 288    | 290           | 293           | 294           |
| Prices, 44% Protein     |               |        |        |               |               | (Dollars)     |        |        |               |               |               |
| Decatur/ton             | 180.53        | 150.80 | 160.98 | 166.95        | 166.00        | 167.93        | 171.80 | 178.95 | 185.01        | 189.41        | 194.66        |
|                         | 199.00        | 100.25 | 171.45 | 104.00        | 102.90        | 103.11        | 109.00 | 137.23 | 200.94        | 200.19        | 214.30        |

## U.S. Soybean Meal Supply and Utilization

#### **U.S.** Wheat

- Despite a 0 percent ARP, wheat **planted area** declined to 70.4 million acres in 1994/95. For 1995/96, wheat acreage is projected to increase to 71.1 million acres. Despite stronger wheat prices, the marginal increase is based upon the smaller-than-expected winter wheat seedings of 49.6 million acres.
- The ARP rate for wheat is projected to be 0 percent during the entire baseline. **Planted area** is projected to stay at 71.1 million acres for the 1996/97 marketing year and then increase to 77.4 million acres by 2003/04. Stronger prices and the fact that only 40 percent of CRP acres are extended account for the increase.
- Net flexed acreage continues to shift out of wheat throughout the projection period. Net flex acres average 2.2 million acres throughout the projection period.
- Wheat yields fell to 37.6 bushels per acre in 1994/95. For 1995/96, yields are projected to increase to 38.8 bushels per acre and then increase to 40.8 bushels per acre by 2003/04.
- Wheat feed and residual use is projected to decrease to 250 million bushels in 1994/95 as the wheat price increases relative to corn. Feed use peaks in 1998/99 and declines thereafter as prices strengthen.
- U.S. wheat exports are projected to strengthen in 1994/95 in response to tight wheat supplies worldwide. Exports fall back to 1.2 billion bushels in 1995/96 and remain there through 1997/98. GATT restraints coupled with increased world demand allow the United States to increase exports after that, reaching almost 1.5 billion bushels by the last year on the baseline.
- Reduced production and increased exports are projected to bring wheat ending stocks to below 500 million bushels in 1994/95. As prices weaken, stocks rebuild through 1997/98, but remain below 600 million bushels.
- Strong export demand in 1994/95 caused an increase in the season average wheat **price** from the 1993/94 level. Prices are projected to weaken in 1995/96 as the export market deteriorates and fall until 1997/98. Prices strengthen near the end of the projection period as the export market improves.
- Participant **net returns** over variable production costs stay relatively flat throughout the projection period as increases in market prices are offset by lower deficiency payments. Nonparticipant returns decline through 1997/98 with weaker market prices, but recover somewhat by 2003/04 as prices strengthen.

|                           | 93/94  | 94/95  | 95/96  | 96/97  | 97/98  | 98/99       | 99/00        | 00/01  | 01/02  | 02/03  | 03/04        |
|---------------------------|--------|--------|--------|--------|--------|-------------|--------------|--------|--------|--------|--------------|
| Descrete                  |        |        |        |        |        | D           |              |        | · ,    |        |              |
|                           | 0.0    | 0.0    |        |        | (      | Percent)    | 0.0          | 0.0    |        | 0.0    | 0.0          |
|                           | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0          | 0.0    | 0.0    | 0.0    | 0.0          |
| NFA Rate                  | 15.0   | 15.0   | 15.0   | 15.0   | 15.0   | 15.0        | 15.0         | 15.0   | 15.0   | 15.0   | 15.0         |
| Participation Rate        | 87.5   | 87.0   | 85.5   | 86.0   | 86.9   | 87,4        | 87.2         | 86.7   | 85.9   | 85.6   | 85.3         |
| Area                      |        |        |        |        | (Mi    | llion Acres | )            |        |        |        |              |
| Base Area                 | 78.4   | 78.1   | 78.1   | 78.1   | 80.3   | 81.9        | 83.0         | 83.8   | 83.8   | 83.9   | 84.1         |
| ARP, PLD. 0-92/85         | 5.7    | 5.2    | 5.2    | 5.5    | 5.8    | 5.9         | 6.1          | 6.0    | 5.7    | 5.7    | 5.7          |
| CRP Idled                 | 10.8   | 10.8   | 10.8   | 10.8   | 8.4    | 6.7         | 5.4          | 4.6    | 4.5    | 4.4    | 4.2          |
| Net Flexed Area           | -2.2   | -2.4   | -1.8   | -2.0   | -2.3   | -2.3        | -2.4         | -2.3   | -2.2   | -2.3   | -2.2         |
| Payment Planted           | 50.6   | 49.9   | 49.4   | 50.1   | 52.3   | 53.7        | 54.2         | 54.5   | 54.2   | 54.1   | 54.0         |
| Planted Area              | 72.2   | 70.4   | 71.1   | 71.1   | 72.1   | 73.3        | 74 1         | 75.7   | 76.9   | 76.7   | 77.4         |
| Harvested Area            | 62.7   | 61.8   | 62.0   | 61.9   | 62.6   | 63.5        | 64.1         | 65.5   | 66.7   | 66.5   | 67.0         |
| Viald                     |        |        |        |        | (Duck  | ala nor Ao  | 1            |        |        |        |              |
| Actual                    | 20.0   | 27.6   | 20.0   | 20.4   |        | iels per Au | ane)<br>2016 | 20.0   | 40.4   | 10 E   | 40.0         |
| Program                   | 30.2   | 34.4   | 30.0   | 34.4   | 34.4   | 34.4        | 34.4         | 34.4   | 31.1   | 3/ /   | 40.0<br>34.4 |
| Flogram                   | 54.4   | 34.4   | 34.4   | 54.4   | 04.4   | 34.4        | 34.4         | 54.4   | 54.4   | 04.4   | 34.4         |
|                           |        |        |        |        | (Milli | on Bushel   | s)           |        |        |        |              |
| Supply                    | 3,036  | 2,974  | 2,951  | 3,023  | 3,096  | 3,168       | 3,202        | 3,228  | 3,278  | 3,302  | 3,336        |
| Beginning Stocks          | 531    | 568    | 470    | 528    | 564    | 594         | 586          | 543    | 527    | 534    | 527          |
| Production                | 2,396  | 2,321  | 2,406  | 2,420  | 2,457  | 2,499       | 2,541        | 2,610  | 2,676  | 2,693  | 2,734        |
| Imports                   | 109    | 85     | 75     | 75     | 75     | 75          | 75           | 75     | 75     | 75     | 75           |
| Domestic Use              | 1.239  | 1.231  | 1.219  | 1.281  | 1.301  | 1.319       | 1.315        | 1.308  | 1.334  | 1.336  | 1.337        |
| Feed Residual             | 274    | 250    | 228    | 269    | 270    | 275         | 261          | 245    | 259    | 248    | 238          |
| Seed                      | 96     | 96     | 96     | 98     | 100    | 101         | 103          | 105    | 105    | 106    | 106          |
| Food, Other               | 869    | 885    | 895    | 915    | 932    | 943         | 951          | 959    | 971    | 983    | 993          |
| Exports                   | 1,228  | 1,273  | 1,204  | 1,178  | 1,201  | 1,263       | 1,343        | 1,393  | 1,409  | 1,438  | 1,477        |
| Total Line                | 2 467  | 2 504  | 0 400  | 2.450  | 2 502  | 2 592       | 2 650        | 0.700  | 0744   | 0 775  | 0.044        |
| Total Use                 | 2,407  | 2,504  | 2,423  | 2,459  | 2,502  | 2,502       | 2,659        | 2,702  | 2,744  | 2,115  | 2,014        |
| Ending Stocks             | 568    | 470    | 528    | 564    | 594    | 586         | 543          | 527    | 534    | 527    | 522          |
| FOR, Special Program      | 6      | 0      | 0      | 0      | 0      | 0           | 0            | 0      | 0      | 0      | 0            |
| CCC Inventory             | 150    | 145    | 150    | 150    | 150    | 150         | 150          | 150    | 150    | 150    | 150          |
| 9-Month Loan              | 67     | 46     | 57     | 72     | 80     | 76          | 64           | 54     | 52     | 52     | 53           |
| "Free <sup>®</sup> Stocks | 345    | 279    | 321    | 342    | 364    | 360         | 329          | 323    | 332    | 326    | 319          |
| Prices and Returns        |        |        |        |        | í      | Dollars)    |              |        |        |        |              |
| Farm Price/bu.            | 3.26   | 3.47   | 3.35   | 3.14   | 2.99   | 3.01        | 3.15         | 3.33   | 3.39   | 3.46   | 3.57         |
| Loan Rate/bu.             | 2.45   | 2.58   | 2.56   | 2.65   | 2.65   | 2.62        | 2 56         | 2 50   | 2 50   | 2 55   | 2.65         |
| Target Price/bu.          | 4.00   | 4.00   | 4.00   | 4.00   | 4.00   | 4.00        | 4 00         | 4.00   | 4.00   | 4 00   | 4 00         |
| FOB Gulf Price/mt         | 143 67 | 155 80 | 150 42 | 141.36 | 134.81 | 135.95      | 141 65       | 149 52 | 152.06 | 155 20 | 159.99       |
| Variable Expenses/a       | 55 98  | 58 39  | 61 64  | 61 70  | 61 49  | 62.82       | 64 69        | 66.83  | 68 63  | 70.51  | 72 84        |
| Partic Returns/a          | 95.01  | 89.30  | 89.22  | 88 17  | 87 22  | 86 51       | 86 84        | 87 30  | 87 16  | 87 39  | 87.37        |
| Nonpartic Returns/a       | 70.45  | 73.90  | 70 17  | 63.00  | 57 62  | 57.68       | 61.86        | 67 65  | 69.22  | 71 58  | 74 80        |
| , temperative recurric/u. | 10.10  | , 0.00 | 10.11  | 00.00  | 01.02  | 07.00       | 01.00        | 07.00  | 00.22  | 71.50  | 74.00        |

# U.S. Wheat Supply and Utilization

# U.S. Rice

- In response to a 0 percent ARP rate and very strong prices at planting time, U.S. rice **planted area** expanded to 3.35 million acres in 1994/95. With a 5 percent ARP rate and lower prices, planted area is expected to decrease to 2.99 million acres in 1995/96. As the ARP rate stays at 0 percent throughout the projection period, planted area ranges between 3.08 and 3.14 million acres.
- Net flexed acreage is projected to continue to shift out of rice. Given the projected rice market returns, rice flex acres should continue to be idled or flexed to other crops.
- Rice yields reached record levels in 1994/95 at over 5,900 pounds per acre. Assuming average weather, yields are projected to decline in 1995/96 and then increase by an annual average of 20 pounds per acre.

• While both food use and brewing use are projected to increase throughout the projection period, the majority of the increase is in the food category.

- Substantial increases in exportable supplies as well as weak U.S. prices cause rice exports to increase to 87.8 million cwt. in 1994/95. After a decline in 1995/96, U.S. exports remain at the 82 million cwt. level until 1999/00. As prices strengthen thereafter, U.S. exports and trade share decline.
- Ending stocks of rice for 1994/95 are projected to increase from the 26 million cwt. level of 1993/94. The 42 million cwt. of 1994/95 is the highest in the projection with stocks showing year-after-year decreases. Ending stocks do remain above 32 million cwt.

• The U.S. average farm **price** is projected to decrease to \$6.31 per cwt. in 1994/95, in part due to the record production. Prices should strengthen to \$6.55 per cwt. in 1995/96 and gradually increase throughout the projection period.

• Participant **net returns** over variable production costs decline as cost-of-production increases more than offset yield increases under constant target prices and program yields. In 1995/96 and beyond, nonparticipant net returns follow a flat to lower path as increases in market prices and yields partially offset the cost increases.

|                          | 93/94          | 94/95          | 95/96  | 96/97          | 97/98          | 98/99             | 99/00          | 00/01   | 01/02  | 02/03  | 03/04           |
|--------------------------|----------------|----------------|--------|----------------|----------------|-------------------|----------------|---|--------|--------|-----------------|
| Program                  |                |                |        |                |                | (Percent)         |                |   |        |        |                 |
| ARP Rate                 | 5.0            | 0.0            | 5.0    | 0.0            | 0.0            | `0.Ó              | 0.0            | 0.0   | 0.0    | 0.0    | 0.0             |
| NFA Rate                 | 15.0           | 15.0           | 15.0   | 15.0           | 15.0           | 15.0              | 15.0           | 15.0  | 15.0   | 15.0   | 15.0            |
| Participation Rate       | 96.3           | 95.2           | 96.3   | 96.5           | 96.6           | 96.6              | 96.4           | 96.3  | 96.1   | 96.2   | 96.0            |
| Area                     |                |                |        |                | (M             | lillion Acres     | <b>)</b>       |   |        |        |                 |
| Base Area                | 4 14           | 4 16           | 4 16   | 4 16           | 4 16           | 4 16              | /<br>          | 4 17  | 4 17   | 4 17   | 4 17            |
| ARP PLD 50-92/85         | 0.67           | 0.26           | 0.63   | 0.47           | 0.48           | 0.49              | 0.49           | 0.50  | 0.40   | 0.51   | 0.51            |
| CRP Idled                | 0.01           | 0.20           | 0.00   | 0.01           | 0.40           | 0.40              | 0.40           | 0.00  | 0.40   | 0.01   | 0.01            |
| Net Flexed Area          | -0.31          | -0.28          | -0.31  | -0.31          | _0.31          | _0.31             | _0.31          | -0.32   | _0.00  | -0.32  | -0.32           |
| Payment Planted          | 2.68           | 3.01           | 272    | 2.80           | 2.80           | 2.88              | 2.97           | -0.02   | 2.95   | 2.95   | 2.92            |
| Planted Area             | 2.00           | 2.25           | 2.12   | 2.03           | 2.03           | 2.00              | 2.07           | 2.07  | 2.00   | 2.00   | 2.04            |
| Planted Area             | 2.92           | 0.00           | 2.99   | 3.14           | 3.13           | 3.14              | 3.13           | 0.1Z  | 0.1Z   | 3.00   | 3.00            |
| Harvesteu Area           | 2.83           | 3.32           | 2.95   | 3,09           | 3,08           | 3.09              | 3.08           | 3.07  | 3.07   | 3.04   | 3.03            |
| Yield                    |                |                |        |                | (Pol           | inds per Ac       | re)            |   |        |        |                 |
| Actual                   | 5,510          | 5,964          | 5,787  | 5,805          | 5,827          | 5,845             | 5,866          | 5,887   | 5,908  | 5,932  | 5,952           |
| Program                  | 4,852          | 4,861          | 4,861  | 4,861          | 4,861          | 4,861             | 4,861          | 4,861   | 4,861  | 4,861  | 4,861           |
|                          |                |                |        |                | (Million       | Hundredw          | eiaht)         |   |        |        | ан<br>1919 - Ал |
| Supply                   | 202.4          | 231.8          | 221.2  | 224 7          | 226.1          | 227.8             | 228.1          | 228.1   | 228.3  | 227.1  | 226.7           |
| Beginning Stocks         | 30 4           | 26.0           | 42.0   | 36.3           | 37.0           | 36.8              | 36.5           | 35.0  | 34 0   | 34.5   | 220.7           |
| Production               | 156 1          | 107.8          | 170.7  | 170 3          | 170 /          | 180.0             | 180.0          | 180.0   | 181 5  | 180.2  | 180.4           |
| Imports                  | 6.9            | 8.0            | 8.6    | 9.1            | 9.7            | 100.9             | 10.8           | 11.3  | 11.9   | 12.4   | 13.0            |
|                          |                |                |        |                |                |                   |                |   |        |        |                 |
| Domestic Use             | 97.0           | 101.9          | 104.0  | 105.7          | 107.4          | 109.0             | 110.7          | 112.4   | 114.1  | 115.9  | 117.6           |
| Food                     | 71.3           | 74.1           | 75.8   | 77.5           | 79.1           | 80.6              | 82.2           | 83.9  | 85.5   | 87.2   | 88.8            |
| Seed                     | 4.2            | 3.7            | 3.9    | 3.9            | 3.9            | 3.9               | 3.9            | 3.9   | 3.9    | 3.8    | 3.8             |
| Brewing                  | 15.0           | 15.1           | 15.2   | 15.3           | 15.4           | 15.5              | 15.6           | 15.6  | 15.7   | 15.8   | 15.9            |
| Residual                 | 6.5            | 9.0            | 9.0    | 9.0            | 9.0            | 9.0               | 9.0            | 9.0   | 9.0    | 9.0    | 9.0             |
| Exports                  | 79.4           | 87.8           | 81.0   | 82.0           | 81.9           | 82.4              | 81.6           | 80.8  | 79.7   | 77.9   | 76.9            |
| Total Use                | 176.4          | 189.7          | 184.9  | 187.8          | 189.3          | 191.4             | 192.3          | 193.2   | 193.8  | 193.7  | 194.5           |
| Ending Stocks            | 26.0           | 42.0           | 36.3   | 37.0           | 36.8           | 36.5              | 35.9           | 34.9  | 34.5   | 33.3   | 32.2            |
| CCC Inventory            | 0.0            | 0.0            | 0.0    | 0.0            | 0.0            | 0.0               | 0.0            | 0.0   | 0.0    | 0.0    | 0.0             |
| "Free" Stocks            | 26.0           | 42.0           | 36.3   | 37.0           | 36.8           | 36.5              | 35.9           | 34.9  | 34.5   | 33.3   | 32.2            |
| Drices and Poturne       |                |                |        |                |                | (Dollaro)         | · · · ·        | 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -<br>1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -<br>1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - |        | · · ·  |                 |
| Files and Returns        | 8.00           | 6 31           | 6 55   | 6 52           | 6 55           | (DUIIAIS)<br>6.69 | 6 79           | 6.06  | 7.00   | 7 15   | 7 20            |
| Loan Rate/owt            | 6.50           | 6.50           | 6.50   | 0.JZ<br>6.50   | 0.00           | 0.00              | 0,70           | 0.90  | 6.60   | 6.60   | 1.59            |
| Target Price/owt         | 10.50          | 10.50          | 10.50  | 10.30          | 0.0U           | 10.30             | 10 74          | 10.50   | 10.50  | 10.74  | 10.50           |
| FOR Houston/mt           | 10./1          | 350.00         | 372 05 | 270.20         | 272.06         | 270 70            | 10.71          | 10.71   | 205.62 | 10.71  | 10.71           |
| Adjusted Morld Price/owt | 407.40<br>5.74 | 509.22         | 512.05 | 510.39         | 312.00<br>E E4 | 3/0./U            | 304.U4<br>E 70 | 393.53<br>E 00  | 393.0Z | 403.77 | 410,47          |
| Variable Exponence       | 0.71<br>221.22 | 3.47<br>240 72 | 0.4Z   | 0.40<br>252.40 | 0.01           | 0,00<br>265 07    | 0./0<br>275.00 | 0.90  | 0.01   | 0.14   | 0.3/            |
| Variable Expenses/a.     | 331.3Z         | 340./3         | 075 0A | 303.13         | 50/.00         | JDD.21            | 3/5.00         | 300.04  | 393.9Z | 400,54 | 418.56          |
| raillo, returns/a,       | 213.04         | 300.43         | 2/0.34 | 204.43         | 219.07         | 200.32            | 254.24         | 238.73  | 228.39 | 215,38 | 196,56          |
| Nonpanic, Returns/a.     | 114.48         | 33.62          | 31.94  | 20.37          | <b>24</b> .11  | 24.99             | 22.56          | 23.92   | 17.40  | 17.58  | 21.23           |

# U.S. Rice Supply and Utilization

# **U.S. Upland Cotton and Cottonseed**

- Cotton **planted area** rose by 310 thousand acres in 1994/95 despite an increase in the ARP rate from 7.5 percent to 11 percent. Strong prices and a 0 percent ARP rate combine to increase planted area to 15.7 million acres in 1995/96. Assuming current program management, the ARP rate is projected to increase to 5 percent in 1997/98 and then increase again to 10 percent in 1998/99. With a 10 percent ARP rate throughout the remainder of the projection period, planted area remains stable through the early years of the next century.
- Net flexed acreage is projected to continue shifting into cotton throughout the projection period. However, net acreage shifted into cotton declines somewhat as soybean market returns increase relative to cotton market returns.
- As the 1994/95 crop progressed, conditions continued to be excellent and the result was a new record high average yield of 707 pounds per acre. Assuming normal growing conditions in 1995/96, yields should fall to 660 pounds per acre and then grow at an annual average rate of about 5 pounds per acre thereafter.
- Mill use in 1994/95 is projected to continue its expansion and reach 10.8 million bales. As consumer demand remains strong, mill use should continue to increase throughout the projection period, although at slower rates than what was seen in the late 1980s.
- Exports of cotton in 1994/95 should increase to 9.38 million bales, in part due to reduced production by major competitors around the world. Exports are projected to remain relatively strong in 1995/96 at 8.49 million bales and then taper off to 6.36 million bales by 2003/04 due to increased competition abroad.
- Despite the new record high production, strong demand causes ending stocks to fall to 2.71 million bales. Ending stocks are projected to rebuild until 1998/99 and remain stable thereafter as the targeted stocks-to-use relationship is maintained.
- With strong exports and tight stocks, the U.S. season average cotton **price** is projected to be 67.5 cents per pound in 1994/95. In 1995/96 and beyond, prices range between 58.6 cents and 63.8 cents per pound.
- As prices remain relatively stable and cost increases more than offset yield increases, cotton **net returns** over variable production costs for participants and nonparticipants decline throughout the projection period.
- The record cotton crop also produced a large cottonseed crop of 7.7 million tons in 1994/95. Cottonseed crush is therefore projected to increase to 3.4 million tons in 1994/95. Other uses of cottonseed, primarily feed, are expected to continue to show increases during the baseline while crush use is expected to show only modest changes. Domestic use of cottonseed oil is projected to experience a mild decline as prices remain strong relative to soybean oil price.
- Cottonseed meal domestic use is projected to decrease throughout the projection period despite increasing livestock inventories.

|                          | 93/94  | 94/95  | 95/96  | 96/97  | 97/98  | 98/99       | 99/00  | 00/01  | 01/02  | 02/03  | 03/04  |
|--------------------------|--------|--------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|
| Program                  |        |        |        |        | (      | Percent)    |        |        |        |        |        |
| ARP Rate                 | 7.5    | 11.0   | 0.0    | 0.0    | 5.0    | 10.0        | 10.0   | 10.0   | 10.0   | 10.0   | 10.0   |
| NFA Rate                 | 15.0   | 15.0   | 15.0   | 15.0   | 15.0   | 15.0        | 15.0   | 15.0   | 15.0   | 15.0   | 15.0   |
| Participation Rate       | 90.7   | 89.1   | 90.1   | 89.9   | 88.7   | 87.8        | 88.1   | 88.1   | 88.1   | 87.1   | 87.4   |
| Агеа                     |        |        |        |        | (Mi    | llion Acres | ;)     |        |        |        |        |
| Base Area                | 15.07  | 15.32  | 15.32  | 15.32  | 15.58  | 15.71       | 15,78  | 15.81  | 15.82  | 15.84  | 15.86  |
| ARP, PLD, 50-92/85       | 1.37   | 1.71   | 0.34   | 0.36   | 1.04   | 1.71        | 1.73   | 1.75   | 1.75   | 1.73   | 1.75   |
| CRP Idled                | 1.43   | 1.43   | 1.43   | 1.43   | 1.14   | 1.00        | 0.92   | 0.88   | 0.87   | 0.85   | 0.82   |
| Net Flexed Area          | 0.14   | 0.19   | 0.27   | 0.22   | 0.22   | 0.22        | 0.18   | 0.14   | 0.10   | 0.11   | 0.06   |
| Payment Planted          | 10.06  | 9.66   | 11.21  | 11.17  | 10.53  | 9.83        | 9 90   | 9.92   | 9.92   | 9.82   | 9.86   |
| Planted Area             | 13 25  | 13 56  | 15 67  | 14.98  | 14 48  | 13.92       | 13 70  | 13.62  | 13 47  | 13 68  | 13.51  |
| Harvested Area           | 12.59  | 13.16  | 14.90  | 14.27  | 13.81  | 13.29       | 13.09  | 13.01  | 12.87  | 13.06  | 12.90  |
| Yield                    |        |        |        |        | (Pour  | nds per Ac  | re)    |        |        |        |        |
| Actual                   | 601    | 707    | 660    | 670    | 676    | 683         | 689    | 693    | 699    | 703    | 708    |
| Program                  | 605    | 606    | 606    | 606    | 606    | 606         | 606    | 606    | 606    | 606    | 606    |
|                          |        |        |        |        |        |             |        |        |        |        |        |
| Supply                   | 20.23  | 22.77  | 23.21  | 23.78  | 24.12  | 24.35       | 24.42  | 24.40  | 24.34  | 24.59  | 24.57  |
| Beginning Stocks         | 4.47   | 3.39   | 2.71   | 3.85   | 4.67   | 5.43        | 5.64   | 5.61   | 5.61   | 5.47   | 5.55   |
| Production               | 15.76  | 19.39  | 20.49  | 19.93  | 19.45  | 18.91       | 18.78  | 18.79  | 18.73  | 19.12  | 19.01  |
| Imports                  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00        | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |
| Domestic Use             |        |        |        |        |        |             |        |        | · · ·  |        |        |
| Mill Use                 | 10.34  | 10.83  | 11.00  | 11.26  | 11.51  | 11.82       | 12.15  | 12.28  | 12.44  | 12.69  | 12.88  |
| Exports                  | 6.61   | 9.38   | 8.49   | 7.98   | 7.31   | 7.03        | 6.80   | 6.65   | 6.57   | 6.49   | 6.36   |
| Total Use                | 16.95  | 20.20  | 19.50  | 19.25  | 18.83  | 18.85       | 18.95  | 18.93  | 19.01  | 19.18  | 19.24  |
| Unaccounted              | 0.10   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14        | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   |
| Ending Stocks            | 3.39   | 2.71   | 3.85   | 4.67   | 5.43   | 5.64        | 5.61   | 5.61   | 5.47   | 5.55   | 5.47   |
| CCC Inventory            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00        | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |
| "Free" Stocks            | 3.39   | 2.71   | 3.85   | 4.67   | 5.43   | 5.64        | 5.61   | 5.61   | 5.47   | 5.55   | 5.47   |
| Prices                   |        |        |        |        |        | (Dollars)   |        |        |        |        |        |
| Farm Price/lb            | 0.584  | 0.675  | 0.638  | 0.624  | 0.613  | 0.597       | 0.592  | 0.586  | 0.614  | 0.600  | 0.616  |
| Calendar Ave. Price/lb   | 0.535  | 0.664  | 0.650  | 0.627  | 0.616  | 0.601       | 0.592  | 0.586  | 0.601  | 0.603  | 0.608  |
| Loan Rate/lb             | 0.524  | 0.500  | 0.519  | 0.507  | 0.523  | 0.531       | 0.531  | 0.520  | 0.511  | 0.511  | 0.507  |
| Target Price/lb          | 0.729  | 0.729  | 0.729  | 0.729  | 0.729  | 0.729       | 0.729  | 0.729  | 0.729  | 0.729  | 0.729  |
| Cotlook A Index/mt       | 1.558  | 1,802  | 1,741  | 1,680  | 1.649  | 1.603       | 1,586  | 1.572  | 1,651  | 1.612  | 1.657  |
| Adjusted World Price/lb. | 0.564  | 0.620  | 0.596  | 0.571  | 0.559  | 0.541       | 0.534  | 0.528  | 0.560  | 0.544  | 0.562  |
| Variable Expenses/a.     | 269.81 | 286.69 | 292.38 | 296.71 | 300.62 | 307.07      | 314.86 | 323.21 | 331.90 | 340.89 | 350.41 |
| Partic. Returns/a.       | 198.65 | 240.19 | 218.63 | 221.91 | 217.62 | 218.33      | 214.34 | 203.71 | 184:28 | 179.86 | 172.76 |
| Nonpartic. Returns/a.    | 137.92 | 242.13 | 171.57 | 168.02 | 163.99 | 152.76      | 141.11 | 130.64 | 146.58 | 127.54 | 134.93 |

# U.S. Upland Cotton Supply and Utilization
| · · · · · · · · · · · · · · · · · · · | 93/94  | 94/95  | 95/96  | 96/97  | 97/98  | 98/99       | 99/00  | 00/01                                 | 01/02  | 02/03  | 03/04  |
|---------------------------------------|--------|--------|--------|--------|--------|-------------|--------|---------------------------------------|--------|--------|--------|
| Area                                  |        |        |        |        | (Mi    | llion Acres | <br>}  | · · · · · · · · · · · · · · · · · · · |        |        |        |
| Harvested Area                        | 12.59  | 13.16  | 14.90  | 14.27  | 13.81  | 13.29       | 13.09  | 13.01                                 | 12.87  | 13.06  | 12.90  |
|                                       |        |        |        |        | (Pou   | nds per Ac  | re)    |                                       |        |        | •      |
| Yield                                 | 1,007  | 1,165  | 1,072  | 1,086  | 1,094  | 1,104       | 1,111  | 1,117                                 | 1,124  | 1,129  | 1,135  |
|                                       |        |        |        |        | (1     | ,000 Tons)  |        |                                       |        |        |        |
| Supply                                | 6,710  | 8,046  | 8,734  | 8,353  | 8,007  | 7,738       | 7,674  | 7,666                                 | 7,636  | 7,773  | 7,721  |
| Beginning Stocks                      | 365    | 375    | 750    | 600    | 450    | 400         | 400    | 400                                   | 400    | 400    | 400    |
| Production                            | 6,343  | 7,669  | 7,982  | 7,751  | 7,555  | 7,336       | 7,272  | 7,264                                 | 7,234  | 7,371  | 7,319  |
| Imports                               | 2      | 2      | 2      | 2      | 2      | 2           | 2      | 2                                     | 2      | 2      | 2      |
| Domestic Use                          | 6,189  | 7,096  | 7,959  | 7,728  | 7,432  | 7,163       | 7,099  | 7,091                                 | 7,061  | 7,198  | 7,146  |
| Crush                                 | 3,525  | 3,880  | 4,033  | 4,006  | 3,951  | 3,864       | 3,825  | 3,798                                 | 3,779  | 3,824  | 3,795  |
| Other                                 | 2,664  | 3,215  | 3,926  | 3,722  | 3,481  | 3,298       | 3,274  | 3,293                                 | 3,282  | 3,374  | 3,351  |
| Exports                               | 150    | 200    | 175    | 175    | 175    | 175         | 175    | 175                                   | 175    | 175    | 175    |
| Total Use                             | 6,339  | 7,296  | 8,134  | 7,903  | 7,607  | 7,338       | 7,274  | 7,266                                 | 7,236  | 7,373  | 7,321  |
| Ending Stocks                         | 375    | 750    | 600    | 450    | 400    | 400         | 400    | 400                                   | 400    | 400    | 400    |
| Prices and Returns                    |        |        |        |        | -      | (Dollars)   |        |                                       |        |        |        |
| Farm Price/ton                        | 113.00 | 88.91  | 80.16  | 85.35  | 91.02  | 94.50       | 87.61  | 85.44                                 | 88.37  | 83.48  | 87.11  |
| Meal Price/ton                        | 170.00 | 133.01 | 138.18 | 143.34 | 142.21 | 146.90      | 152.17 | 159.77                                | 165.24 | 167.52 | 173.30 |
| Oil Price/cwt                         | 28,75  | 23.49  | 22.89  | 23,11  | 23.84  | 25.01       | 24.08  | 23,23                                 | 23.73  | 23.01  | 23.59  |
| Crushing Margin/ton                   | 53.75  | 48.47  | 57.57  | 55.41  | 51.65  | 54.14       | 60.32  | 63.13                                 | 64.31  | 67.84  | 68.72  |

## U.S. Cottonseed Supply and Utilization

|                   | 93/94  | 94/95 | 95/96  | 96/97  | 97/98  | 98/99      | 99/00      | 00/01  | 01/02  | 02/03  | 03/04  |
|-------------------|--------|-------|--------|--------|--------|------------|------------|--------|--------|--------|--------|
|                   |        |       |        |        | (Mil   | lion Pound | s)         |        |        |        |        |
| Supply            | 1,225  | 1,385 | 1,467  | 1,461  | 1,443  | 1,414      | ,<br>1,400 | 1,391  | 1,384  | 1,398  | 1,390  |
| Beginning Stocks  | 81     | 85    | 116    | 119    | 120    | 119        | 118        | 118    | 117    | 116    | 117    |
| Production        | 1,125  | 1,280 | 1,331  | 1,322  | 1,304  | 1,275      | 1,262      | 1,253  | 1,247  | 1,262  | 1,252  |
| Imports           | 19     | 20    | 20     | 20     | 20     | 20         | 20         | 20     | 20     | 20     | 20     |
| Domestic Use      | 940    | 1,070 | 1,147  | 1,142  | 1,124  | 1,097      | 1,082      | 1,074  | 1,068  | 1,081  | 1,073  |
| Exports           | 200    | 200   | 200    | 200    | 200    | 200        | 200        | 200    | 200    | 200    | 200    |
| Total Use         | 1,140  | 1,270 | 1,347  | 1,342  | 1,324  | 1,297      | 1,282      | 1,274  | 1,268  | 1,281  | 1,273  |
| Ending Stocks     | 85     | 116   | 119    | 120    | 119    | 118        | 118        | 117    | 116    | 117    | 116    |
| Prices            |        | · .   |        |        |        | (Dollars)  |            |        |        |        |        |
| Valley Points/cwt | 28.75  | 23.49 | 22.89  | 23.11  | 23.84  | 25.01      | 24.08      | 23.23  | 23.73  | 23.01  | 23.59  |
| Valley Points/mt  | 633.83 | 517.9 | 504.73 | 509.45 | 525.58 | 551.41     | 530.81     | 512.23 | 523.25 | 507.33 | 520.07 |

## U.S. Cottonseed Oil Supply and Utilization

## U.S. Cottonseed Meal Supply and Utilization

|   | 93/94                     | 94/95                     | 95/96                     | 96/97                     | 97/98                     | 98/99                         | 99/00                     | 00/01                     | 01/02                     | 02/03                     | 03/04                     |
|---|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|   |                           | · · ·                     |                           |                           |                           | 000 Tono)                     |                           |                           |                           |                           |                           |
| Supply<br>Beginning Stocks<br>Production<br>Imports | 1,585<br>29<br>1,555<br>1 | 1,776<br>30<br>1,746<br>0 | 1,850<br>35<br>1,815<br>0 | 1,838<br>35<br>1,803<br>0 | 1,814<br>36<br>1,778<br>0 | 1,777<br>38<br>1,739<br>0     | 1,759<br>37<br>1,721<br>0 | 1,746<br>37<br>1,709<br>0 | 1,737<br>37<br>1,700<br>0 | 1,757<br>36<br>1,721<br>0 | 1,744<br>37<br>1,708<br>0 |
| Domestic Use  | 1,445                     | 1,632                     | 1,715                     | 1,701                     | 1,676                     | 1,639                         | 1,621                     | 1,609                     | 1,602                     | 1,620                     | 1,609                     |
| Exports   | 110                       | 110                       | 100                       | 100                       | 100                       | 100                           | 100                       | 100                       | 100                       | 100                       | 100                       |
| Total Use   | 1,555                     | 1,742                     | 1,815                     | 1,801                     | 1,776                     | 1,739                         | 1,721                     | 1,709                     | 1,702                     | 1,720                     | 1,709                     |
| Ending Stocks                                       | 30                        | 35                        | 35                        | 36                        | 38                        | 37                            | 37                        | 37                        | 36                        | 37                        | 36                        |
| Prices<br>Memphis/ton<br>Memphis/mt                 | 170.00<br>187.39          | 133.01<br>146.62          | 138.18<br>152.32          | 143.34<br>158.01          | 142.21<br>156.76          | (Dollars)<br>146.90<br>161.93 | 152.17<br>167.73          | 159.77<br>176.12          | 165.24<br>182.14          | 167.52<br>184.66          | 173.30<br>191.03          |

### **U.S. Sugar and High-Fructose Corn Syrup**

- Sugar beet area harvested in 1994/95 increased by 38 thousand acres from the previous year's level. With higher prices, beet area is projected to increase slightly in 1995/96 with more modest expansion in area expected after 1998/99.
- Sugarcane area harvested fell in 1994/95 with most of the decrease occurring in Hawaii rather than the mainland. Harvested area shows modest growth throughout the projection period with growth appearing in mainland acres.
- Sugar beet yields in 1994/95 rose to 21.91 tons per acre reflecting improved growing conditions compared to 1993/94. Assuming normal weather, yields should drop in 1995/96 and grow modestly thereafter.
- Average yields for sugar cane increased in 1994/95 to 33.15 tons per acre. Yields are projected to show marginal declines throughout the projection period as the high-yielding acreage in Hawaii becomes a smaller percentage of total cane area.
- Total **imports** of raw sugar fell below 1.8 million tons in fiscal year 1994 with marketing quotas being imposed. Given import levels, marketing quotas are not imposed after 1994.
- Sugar consumption is projected to increase throughout the projection period as population increases, with per capita consumption remaining relatively flat.
- Ending stocks of sugar fell below 1.4 million tons for fiscal year 1994. With increased production, ending stocks rebound to almost 1.5 million tons in fiscal year 1995 and remain relatively flat throughout the baseline.
- Growth in high-fructose corn syrup (HFCS) **production** is projected to continue through 2003, although future growth is expected to be more moderate than growth in the 1980s.
- **Consumption** of HFCS will continue to increase due to marginal increases in per capita consumption and population growth.

|                       | 93/94  | 94/95   | 95/96  | 96/97                                 | 97/98  | 98/99  | 99/00  | 00/01  | 01/02     | 02/03  | 03/04    |
|-----------------------|--------|---------|--------|---------------------------------------|--------|--------|--------|--------|-----------|--------|----------|
| Sugar Beets           |        |         |        | · · · · · · · · · · · · · · · · · · · |        |        |        |        | · · · · · |        | <u> </u> |
| Harv. Area (1,000 a.) | 1,409  | 1,447   | 1,471  | 1,475                                 | 1,476  | 1,485  | 1,495  | 1,501  | 1,506     | 1,510  | 1,515    |
| Yield (tons/a.)       | 18.62  | 21.91   | 21.24  | 21.31                                 | 21.39  | 21.46  | 21.54  | 21.61  | 21.68     | 21.76  | 21.83    |
| Prod. (1,000 tons)    | 26,249 | 31,704  | 31,248 | 31,445                                | 31,557 | 31,878 | 32,186 | 32,431 | 32,657    | 32,857 | 33,081   |
| Sugarcane             |        |         |        |                                       |        |        |        |        |           |        |          |
| Harv. Area (1,000 a.) | 924    | 904     | 903    | 906                                   | 911    | 917    | 923    | 929    | 936       | 943    | 949      |
| Yield (tons/a.)       | 32.83  | 33.15   | 32.64  | 32.61                                 | 32.59  | 32.57  | 32.54  | 32.52  | 32.50     | 32.47  | 32.45    |
| Prod. (1,000 tons)    | 30,342 | .29,965 | 29,487 | 29,555                                | 29,688 | 29,853 | 30,035 | 30,222 | 30,414    | 30,607 | 30,804   |
|                       |        |         |        |                                       |        |        |        |        |           |        |          |

### **U.S. Sugar Crop Production**

# U.S. Sugar Supply and Utilization

|                                       | 1994   | 1995   | 1996   | 1997   | 1998       | 1999       | 2000         | 2001   | 2002      | 2003   | 2004   |
|---------------------------------------|--------|--------|--------|--------|------------|------------|--------------|--------|-----------|--------|--------|
| · · · · · · · · · · · · · · · · · · · |        |        |        | (1,000 | Short Tons | s, Raw Val | ue, Fiscal ' | Year)  |           |        |        |
| Supply                                | 11,153 | 11,504 | 11,647 | 11,721 | 11,795     | 11,904     | 11,990       | 12,058 | 12,127    | 12,188 | 12,271 |
| Beginning Stocks                      | 1,704  | 1,338  | 1,476  | 1,522  | 1,537      | 1,537      | 1,532        | 1,524  | 1,515     | 1,504  | 1,492  |
| Production                            | 7,677  | 8,290  | 8,220  | 8,290  | 8,354      | 8,454      | 8,555        | 8,647  | 8,738     | 8,825  | 8,916  |
| Imports                               | 1,772  | 1,876  | 1,951  | 1,910  | 1,904      | 1,912      | 1,903        | 1,887  | 1,874     | 1,859  | 1,862  |
| Quota                                 | 1,179  | 1,361  | 1,401  | 1,360  | 1,354      | 1,362      | 1,353        | 1,337  | 1,324     | 1,309  | 1,312  |
| Non-Quota                             | 593    | 515    | 550    | 550    | 550        | 550        | 550          | 550    | 550       | 550    | 550    |
| Utilization                           | 9,787  | 10,028 | 10,125 | 10,185 | 10,258     | 10,372     | 10,466       | 10,544 | 10,623    | 10,695 | 10,791 |
| Disappearance                         | 9,333  | 9,518  | 9,675  | 9,735  | 9,808      | 9,922      | 10,016       | 10,094 | 10,173    | 10,245 | 10,341 |
| Exports                               | 454    | 510    | 450    | 450    | 450        | 450        | 450          | 450    | 450       | 450    | 450    |
| Error Adjustment                      | . 28   | 0      | 0      | -0     | -0         | 0          | 0            | 0      | -0        | -0     | 0      |
| Ending Stocks                         | 1,338  | 1,476  | 1,522  | 1,537  | 1,537      | 1,532      | 1,524        | 1,515  | 1,504     | 1,492  | 1,480  |
| Prices                                |        |        |        | (      | Cents ner  | Pound Fis  | cal Year)    |        | · · · · · |        | •      |
| N.Y. Spot Raw Sugar                   | 22.05  | 21.77  | 21.77  | 21.77  | 21.77      | 21.77      | 21.77        | 21.77  | 21.77     | 21.77  | 21.77  |
| Cane Loan Rate                        | 18.00  | 18.00  | 18.00  | 18.00  | 18.00      | 18.00      | 18.00        | 18.00  | 18.00     | 18.00  | 18.00  |

|                      | 1004  | 1005  | 1006  | 1007      | 1008        | 1000       | 2000       | 2001  | 2002  | 2003  | 2004  |
|----------------------|-------|-------|-------|-----------|-------------|------------|------------|-------|-------|-------|-------|
|                      | 1334  | 1992  | 1990  | 1997      | 1990        | 1555       | 2000       | 2001  | 2002  | 2000  | 2004  |
|                      |       |       |       | (1.000 Sh | ort Tons J  | Raw Value  | Calendar   | Year) |       |       |       |
| Supply               | 7.658 | 7.881 | 7.868 | 8.097     | 8,290       | 8.366      | 8.489      | 8.579 | 8,669 | 8,787 | 8.818 |
| Production           | 7,500 | 7.706 | 7.693 | 7.922     | 8,115       | 8,191      | 8.314      | 8.404 | 8,494 | 8,612 | 8,643 |
| Imports              | 158   | 175   | 175   | 175       | 175         | 175        | 175        | 175   | 175   | 175   | 175   |
| Utilization          | 7,658 | 7,881 | 7,868 | 8,097     | 8,290       | 8,366      | 8,489      | 8,579 | 8,669 | 8,787 | 8,818 |
| Consumption          | 7,488 | 7,721 | 7,708 | 7,937     | 8,130       | 8,206      | 8,329      | 8,419 | 8,509 | 8,627 | 8,658 |
| Exports              | 170   | 160   | 160   | 160       | 160         | 160        | 160        | 160   | 160   | 160   | 160   |
| Net Change in Stocks | 0     | 0     | 0     | 0         | 0           | 0          | 0          | 0     | 0     | 0     | 0     |
| Price                |       |       |       | (Ce       | ents per Po | ound, Cale | ndar Year) |       |       |       |       |
| Midwest Wholesale    | 20.99 | 20.24 | 20.39 | 20.22     | 20.12       | 20.25      | 20.28      | 20.37 | 20.45 | 20.46 | 20.66 |

# U.S. High-Fructose Corn Syrup Supply and Utilization

# Livestock and Dairy

• U.S. Beef

• U.S. Pork

• U.S. Poultry

• U.S. Meat Consumption and Expenditures

• U.S. Livestock Production and Prices

• U.S. Dairy

• U.S. Dairy Products

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# U.S. Beef

• Beef production in 1995 rises 400 million pounds over 1994's 24.4 billion pounds total. The beef cycle continues its expansion through the mid-to-late 1990s to reach a peak of approximately 26 billion pounds in 1998. Liquidation of the beef cow herd causes a subsequent decline in the beef cycle and a similar movement in beef production through 2003.

• Cattle and calves on farms increase to nearly 106 million head by 1997 and then slip to 97 million head by 2003. The cycle underlying this movement is far less pronounced than those of the past.

- In 1995, the Nebraska Direct 1,100-1,300 pound fed-steer price falls to \$67.08 per cwt. This decline in prices continues as production climbs, reaching a bottom of \$61.49 per cwt. in 1997, followed by a recovery to over \$80 per cwt. by 2003 as production slips.
- The Oklahoma City 600-700 pound feeder-steer price falls to \$79.77 per cwt. in 1995, a decline of more than \$3.00 per cwt. from the 1994 level. Feeder-steer prices follow fed-steer prices, reaching a bottom level of \$70.73 per cwt. in 1997.

• Improved **cow-calf returns** over the last few years have caused cow-calf producers to expand the beef cow herd. Expansion is expected to be much slower and smaller than has been experienced in previous cycles. The beef cow herd is expected to increase to nearly 36 million head in 1996 before contracting to about 30 million head by 2003 as cow-calf returns weaken substantially during the middle part of the projection period.

- Although lessened by generally lower net imports, **beef consumption** parallels the production cycle with a peak of over 26 billion pounds in 1997. On a per capita basis, beef consumption reaches its highest level, 68.1 pounds, in 1996 and falls for the next seven years.
- **Retail beef prices** generally move with fed-steer prices, but the percent changes are usually smaller. From 1995 to 2004, beef retail prices rise much less than the projected general inflation rate. Further weakening of beef demand is evident as both real beef prices and per capita beef consumption decline over the projection period relative to 1994 levels.

|                                       | 1994           | 1995   | 1996   | 1997                                  | 1998        | 1999        | 2000     | 2001           | 2002   | 2003   | 2004       |
|---------------------------------------|----------------|--------|--------|---------------------------------------|-------------|-------------|----------|----------------|--------|--|------------|
| · · · · · · · · · · · · · · · · · · · | · . · ·        | ······ |        | · · · · · · · · · · · · · · · · · · · | (M          | illion Head | )        | ······ · · · · |        |  |            |
| Cattle and Calves (Jan. 1)            | 101.7          | 104.0  | 105.5  | 105.7                                 | 104.5       | 102.4       | , 100.1  | 98.4           | 97.4   | 97.0   | 97.6       |
| Beef Cows (Jan. 1)                    | 34.9           | 35.4   | 35.8   | 35.4                                  | 34.6        | 33.4        | 32.0     | 30.8           | 30.2   | 30.1   | 30.3       |
| Total Cattle Slaughter                | 34.2           | 35.1   | 36.1   | 36.8                                  | 36.7        | 35.9        | 34.3     | 32.9           | 32.3   | 31.8   | 32.4       |
|                                       |                |        |        |                                       | (Mill       | lion Pound  | s)       |                |        |  |            |
| Supply                                | 27,320         | 27,890 | 28,565 | 29,080                                | 29,203      | 28,882      | 28,133   | 27,354         | 27,142 | 26,815   | 27,238     |
| Beginning Stocks                      | 529            | 575    | 584    | 598                                   | 609         | 610         | 602      | 584            | 567    | 563  | 556        |
| Imports                               | 2,387          | 2,485  | 2,525  | 2,549                                 | 2,578       | 2,603       | 2,627    | 2,627          | 2,627  | 2,627  | 2,627      |
| Production                            | 24,404         | 24,830 | 25,456 | 25,933                                | 26,016      | 25,669      | 24,904   | 24,143         | 23,948 | 23,625   | 24,055     |
| Disappearance                         | 26,745         | 27,306 | 27,967 | 28,471                                | 28,593      | 28,281      | 27,549   | 26,787         | 26,579 | 26,259   | 26,672     |
| Domestic Use                          | <u>2</u> 5,169 | 25,660 | 25,896 | 26,056                                | 25,954      | 25,811      | 25,141   | 24,590         | 24,590 | 24,362   | 24,752     |
| Exports                               | 1,576          | 1,646  | 2,072  | 2,415                                 | 2,638       | 2,469       | 2,408    | 2,196          | 1,989  | 1,897  | 1,920      |
| Ending Stocks                         | 575            | 584    | 598    | 609                                   | 610         | 602         | 584      | 567            | 563    | 556  | 566        |
| Per Capita Consumption                | •.             |        |        |                                       | (           | (Pounds)    |          |                |        | 1. N   | ÷          |
| Carcass Weight                        | 96.4           | 97.3   | 97.3   | 97.0                                  | 95.7        | 94.3        | 91.1     | 88.3           | 87.6   | 86.0   | 86.7       |
| Retail Weight                         | 67.5           | 68.1   | 68.1   | 67.9                                  | 67.0        | 66.0        | 63.8     | 61.8           | 61.3   | 60.2   | 60.7       |
| Change                                | 3.7%           | 0.9%   | -0.1%  | -0.3%                                 | -1.3%       | -1.4%       | -3.4%    | -3.0%          | -0.8%  | -1.8%  | 0.8%       |
| Prices                                |                |        |        |                                       |             |             |          |                |        | e de la companya de |            |
| 1100 - 1300 lb                        |                |        |        | · · · ·                               | (Dollars p  | er Hundred  | dweight) |                |        |  | ан.<br>1 т |
| Nebraska Direct Steers                | 68.83          | 67.08  | 64.85  | 61.49                                 | 63.13       | 66.80       | 72.61    | 78.15          | 81.07  | 83.31  | 80.42      |
| Change<br>600 - 700 lb                | -9.9%          | -2.5%  | -3.3%  | -5.2%                                 | 2.7%        | 5.8%        | 8.7%     | 7,6%           | 3.7%   | 2.8%   | -3.5%      |
| Oklahoma City Feeder Steers           | 83.08          | 79.77  | 75.96  | 70.73                                 | 71.99       | 76.62       | 83.22    | 90.74          | 93.76  | 95.01  | 89.69      |
| Change                                | -9.4%          | -4.0%  | -4.8%  | -6.9%                                 | 1.8%        | 6.4%        | 8.6%     | 9.0%           | 3.3%   | 1.3%   | -5.6%      |
| Utility Cows, Sioux Falls             | 42.56          | 40.24  | 38.11  | 35.12                                 | 35.46       | 38.08       | 42.38    | 46.16          | 47.45  | 47.56  | 44.71      |
| Change                                | -10.4%         | -5.5%  | -5.3%  | -7.8%                                 | 1.0%        | 7.4%        | 11.3%    | 8.9%           | 2.8%   | 0.2%   | -6.0%      |
|                                       |                |        |        |                                       | (Dolla      | irs per Pou | ind)     |                |        |  |            |
| Beef Retail                           | 2.83           | 2.79   | 2.76   | 2.70                                  | 2.71        | 2.76        | 2.86     | 2.95           | 3.00   | 3.02   | 2.99       |
| Change                                | -3.6%          | -1.5%  | -1.0%  | -2.3%                                 | 0.5%        | 1.8%        | 3.8%     | 3.2%           | 1.5%   | 0.5%   | -0.9%      |
| Net Returns                           |                |        |        |                                       | (Doll       | ars per Co  | w)       | ĸ              |        |  |            |
| Cow - Calf                            | 44.25          | 24.80  | 1.60   | -26.76                                | -23.34      | -2.32       | 30.20    | 65.20          | 76.25  | 79.20  | 45.03      |
|                                       |                |        |        |                                       | (Dollars pe | er Hundred  | lweight) |                |        |  |            |
| Feedlot                               | -5.04          | -4.03  | -4.21  | -3.81                                 | -2.75       | -2.16       | -0.47    | 0.13           | 0.96   | 2.16   | 1.88       |

# U.S. Beef Supply and Utilization

# U.S. Pork

- **Pork production** is expected to climb to 17.8 billion pounds in 1995, which is only slightly greater than the record amount of pork production seen in 1994. Since grain stocks are at relatively low levels, the pork cycle could change markedly if abnormal weather conditions occur during the forecast period.
- The pork breeding herd fell by 240 thousand head from December 1993 to December 1994. By December 1995, the herd is expected to decline by another 160 thousand head as hog producers respond to unfavorable returns and uncertain grain markets. Continued increases in technological efficiency allow further strength in pork production despite a smaller breeding herd. Improvements in farrowings per sow, pigs per litter, and heavier carcass weights will all support production as the breeding herd fluctuates at or a bit below seven million head.
- The Iowa-Southern Minnesota 230-250 pound barrow and gilt price is expected to rise to \$40.93 per cwt. in 1995. Throughout the projection period, the barrow and gilt prices are counter-cyclical to production, ranging from the \$38.78 to \$49.31 per cwt. This price range is lower than what has been experienced in the past primarily due to advancements in technological efficiencies.
- Farrow-to-finish returns follow barrow and gilt prices with some deviations caused by feed costs. Changes in feed supplies attributable to unfavorable weather conditions could cause these returns to change substantially, resulting in a dramatically different production cycle.
- Domestic **pork consumption** follows a path similar to production. After holding at 53.1 pounds per person in 1995, per capita consumption gradually and unevenly drops to 49.1 pounds by the end of the baseline.
- Foreign trade will contribute to total demand as net imports of pork decline by over 1.2 billion pounds from 1994 to 2004. In fact, the United States becomes a net exporter of pork in 1997.

• Retail pork prices mirror barrow and gilt prices, though the changes are proportionately smaller. Retail prices rise only slightly to \$1.99 per pound in 1995 and tend to increase over the baseline to reach \$2.27 per pound by 2004.

|                         | 1994   | 1995        | 1996        | 1997   | 1998       | 1999        | 2000     | 2001        | 2002     | 2003    | 2004   |
|-------------------------|--------|-------------|-------------|--------|------------|-------------|----------|-------------|----------|---------|--------|
| · · · · · ·             |        |             |             | ;      |            |             |          |             | <u>.</u> |         |        |
| Hogs on Farms           | 50.7   | <b>F4</b> 7 | <b>F4 C</b> | 50.0   | (M         | Illion Head | )        | <b>54 4</b> | ro r     | 50.0    | 64.0   |
| Market (Dec. 1)         | 52.7   | 51.7        | 51.6        | 52.2   | 51.0       | 50.9        | 50.9     | 51.1        | 52.5     | 52.2    | 51.3   |
| Total Hag Sloughter     | 0.90   | 0.00        | 0.92        | 7.00   | 0.00       | 0.73        | 0.01     | 7.07        | 100 6    | 100 4   | 0.00   |
| Total Hoy Slaughter     | 95.0   | 95.7        | 94.7        | 97.1   | 99.5       | 97.2        | 90.0     | 99.3        | 100.6    | 100.4   | 98.7   |
| - · · ·                 |        |             |             |        | (Mill      | ion Pound   | s)       |             |          |         |        |
| Supply                  | 18.809 | 18.942      | 18.820      | 19.234 | 19.701     | 19.363      | 19.324   | 19.968      | 20.296   | 20.360  | 20.041 |
| Beginning Stocks        | 359    | 420         | 409         | 404    | 420        | 421         | 404      | 409         | 424      | 419     | 415    |
| Imports                 | 744    | 730         | 760         | 655    | 575        | 550         | 525      | 525         | 525      | 525     | 525    |
| Production              | 17,706 | 17,792      | 17,651      | 18,175 | 18,706     | 18,392      | 18,395   | 19,033      | 19,347   | 19,415  | 19,101 |
| Disappearance           | 18,389 | 18,533      | 18,417      | 18,815 | 19,280     | 18,959      | 18,914   | 19,544      | 19,877   | 19,945  | 19,634 |
| Domestic Use            | 17,864 | 18,055      | 17,920      | 18,140 | 18,287     | 18,049      | 17,421   | 17,605      | 18,258   | 18,487  | 18,110 |
| Exports                 | 525    | 478         | 497         | 675    | 993        | 910         | 1,493    | 1,939       | 1,618    | 1,458   | 1,524  |
| Ending Stocks           | 420    | 409         | 404         | 420    | 421        | 404         | 409      | 424         | 419      | 415     | 407    |
| Per Capita Consumption  |        |             |             |        |            | (Pounds)    |          |             |          |         |        |
| Carcass Weight          | 68.4   | 68.5        | 67.3        | 67.5   | 67.4       | 66.0        | 63.1     | 63.2        | 65.0     | 65.3    | 63.4   |
| Retail Weight           | 53.1   | 53.1        | 52.2        | 52.3   | 52.2       | 51.1        | 48.9     | 49.0        | 50.4     | 50,6    | 49.1   |
| Change                  | 1.5%   | -0.1%       | -1.7%       | 0.3%   | -0.1%      | -2.2%       | -4.3%    | 0.2%        | 2.8%     | 0.4%    | -2.9%  |
| Prices                  |        |             |             |        |            |             |          |             |          | · · · · |        |
| 230-250 lb              |        |             |             |        |            |             |          |             |          |         |        |
| lowa-Southern Minnesota |        |             |             |        | (Dollars p | er Hundred  | dweight) |             |          |         |        |
| Barrows and Gilts       | 40.08  | 40.93       | 44.87       | 42.24  | 38.78      | 41.80       | 47.03    | 46.81       | 43.57    | 45.52   | 49.31  |
| Change                  | -13.1% | 2.1%        | 9.6%        | -5.8%  | -8.2%      | 7.8%        | 12.5%    | -0.4%       | -6.9%    | 4.5%    | 8.3%   |
| 6 Market Sows           | 31.82  | 32.45       | 34.78       | 32.54  | 30.21      | 32.20       | 33.68    | 32.64       | 30,45    | 32.02   | 35.68  |
| Change                  | -14.2% | 2.0%        | 7.2%        | -6.4%  | -7.2%      | 6.6%        | 4.6%     | -3.1%       | -6.7%    | 5.2%    | 11.4%  |
| · · · · ·               |        |             |             |        | (Dolla     | rs per Pou  | ind)     |             |          |         |        |
| Pork Retail             | 1.98   | 1.99        | 2.07        | 2.06   | 2.02       | 2.09        | 2.21     | 2.20        | 2.13     | 2.17    | 2.27   |
| Change                  | 0.3%   | 0.4%        | 4.1%        | -0.7%  | -1.6%      | 3.2%        | 5.8%     | -0.6%       | -3.0%    | 2.0%    | 4.4%   |
| Net Returns             |        |             |             |        | (Dollars p | er Hundred  | lweight) |             |          |         |        |
| Farrow - Finish         | -1.43  | -0.43       | 2.33        | 0.03   | -3.29      | -0.97       | 3.72     | - 2.49      | -1.57    | -0.20   | 2.36   |

### U.S. Pork Supply and Utilization

# **U.S. Poultry and Eggs**

- Broiler and turkey production increase by 6 and 4 percent, respectively, in 1995. Both continue to increase throughout the projection period, yet the growth rates are somewhat below those of the 1980s. The advantages of poultry over beef and pork in cost efficiency and product development are expected to slow. Broiler production increases by more than eleven billion pounds from 1994 to 2004, while turkey production climbs one and a half billion pounds over the same period.
- A one and a half billion pound increase in broiler exports over the projection period somewhat limits domestic consumption. After a 5.2 percent jump in **per capita broiler consumption** in 1995, the rate of increase varies between 0.9 and 3.7 percent. **Per capita turkey consumption** climbs 1.9 percent in 1995 and subsequently grows at a pace similar to that of broiler consumption. Continuing strong demand supports poultry meat consumption even as **broiler retail prices** climb to \$0.97 per pound and **turkey retail prices** rise to \$1.05 per pound in 2004.

• Broiler net returns decline slightly in 1995 as prices slip. Net returns remain between 4.7 and 6.8 cents per pound throughout the baseline. Turkey net returns also become less favorable in 1995 as prices weaken and fluctuate from 0.6 to 2.9 cents per pound across the projection. Feed prices rise tend to rise over the baseline, limiting gains in net returns.

- Due to the jump in poultry production in 1995, wholesale prices weaken. The **12-city wholesale broiler** price falls to 52.85 cents per pound and afterwards rises to reach 58.56 cents per pound in 2004. The **turkey wholesale price** falls in 1995 to 64.63 cents per pound. It then climbs at a more moderate pace than the broiler wholesale price, reaching 66.21 cents per pound.
- Egg production increases in 1995 to 6.24 billion dozen, before producers respond to continuing negative net returns by decreasing the egg-laying flock in 1996. Egg production later tends to rise over the baseline, reaching 6.8 billion dozen due to a larger number of hens and further technological enhancements.
- Egg disappearance mirrors production with the portion consumed as shell eggs diminishing in favor of breaking egg consumption. In per capita terms, shell egg consumption declines 1.5 percent in 1995 and falls each year of the baseline, whereas breaking egg consumption per capita increases 5.1 percent in 1995 and an additional 3 to 5.2 percent each year thereafter.
- Egg wholesale and retail prices continue to drop in 1995, reaching 65 and 82.5 cents per dozen respectively. Over the projection period, egg prices fluctuate between 70.5 and 77 cents per dozen at the wholesale level and 84.5 and 89 cents per dozen in the retail market.
- Net returns in the egg industry drop in 1995 to -0.64 cents per dozen as prices slip further and feed prices begin to recover. Over the baseline, the industry's net returns vary from 4 and 8 cents per dozen.

|                             | 1994   | 1995   | 1996   | 1997   | 1998   | 1999       | 2000   | 2001   | 2002   | 2003        | 2004   |
|-----------------------------|--------|--------|--------|--------|--------|------------|--------|--------|--------|-------------|--------|
|                             |        |        |        |        | (Mill  | lion Pound | s)     |        | . *    |             |        |
| Supply                      | 24.046 | 25.645 | 26.477 | 27.735 | 28.874 | 29:921     | 30.965 | 32.041 | 33.085 | 34,150      | 35.187 |
| Beginning Stocks            | 358    | 440    | 427    | 427    | 431    | 434        | 436    | 438    | 440    | 443         | 445    |
| Production                  | 23,688 | 25,205 | 26,050 | 27,308 | 28,443 | 29,487     | 30,529 | 31,604 | 32,645 | 33,708      | 34,742 |
| Disappearance               | 23,606 | 25,217 | 26,050 | 27,305 | 28,440 | 29,485     | 30,527 | 31,601 | 32,643 | 33,706      | 34,740 |
| Domestic Use                | 20,796 | 22,208 | 23,331 | 24,585 | 25,411 | 26,059     | 26,970 | 27,868 | 28,698 | 29,611      | 30,518 |
| Exports                     | 2,810  | 3,009  | 2,719  | 2,719  | 3,029  | 3,427      | 3,557  | 3,733  | 3,945  | 4,094       | 4,222  |
| Ending Stocks               | 440    | 427    | 427    | 431    | 434    | 436        | 438    | 440    | 443    | 445         | 447    |
| Per Capita Consumption      |        |        |        |        | · · ·  | (Pounds)   |        |        |        |             |        |
| Retail Weight               | 79.7   | 84.2   | 87.6   | 91.5   | 93.7   | 95.2       | 97.7   | 100.1  | 102.2  | 104.6       | 106.9  |
| Retail Weight less Pet Food | 70.1   | 73.7   | 76.2   | 79.0   | 80.3   | 81.0       | 82.6   | 84.0   | 85.1   | 86.5        | 87.8   |
| Change                      | 2.6%   | 5.2%   | 3.3%   | 3.7%   | 1.7%   | 0.9%       | 1.9%   | 1.7%   | 1.4%   | 1.6%        | 1.5%   |
| Prices                      |        |        |        |        | (Cen   | ts per Pou | nd)    |        |        | · · · · · · |        |
| 12-City Wholesale           | 55.69  | 52.85  | 54.39  | 55.59  | 54.39  | 54.98      | 56.77  | 57.75  | 57.21  | 57.50       | 58.56  |
| Change                      | 0.9%   | -5.1%  | 2.9%   | 2.2%   | -2.2%  | 1.1%       | 3.3%   | 1.7%   | -0.9%  | 0.5%        | 1.8%   |
| Broiler Retail              | 90.13  | 86.29  | 86,94  | 86.83  | 85.95  | 87.71      | 91.16  | 93.60  | 92.48  | 93.73       | 96.46  |
| Change                      | 8.7%   | -4.3%  | 0.8%   | -0.1%  | -1.0%  | 2.0%       | 3.9%   | 2.7%   | -1.2%  | 1,4%        | 2.9%   |
| Net Returns                 | 6.47   | 4.74   | 5.39   | 6.42   | 5.18   | 5.16       | 6.47   | 6.80   | 5.62   | 5.46        | 5.69   |

# U.S. Broiler Supply and Utilization

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|                          | 1994  | 1995  | 1996   | 1997   | 1998  | 1999       | 2000   | 2001   | 2002   | 2003     | 2004     |
|--------------------------|-------|-------|--------|--------|-------|------------|--------|--------|--------|----------|----------|
|                          |       |       |        |        | (Mil  | lion Pound | s)     |        |        |          |          |
| Supply                   | 5,181 | 5,368 | 5,517  | 5,678  | 5,832 | 5,978      | 6,130  | 6,292  | 6,451  | 6,614    | 6,775    |
| Beginning Stocks         | 249   | 240   | 245    | 245    | 250   | 254        | 253    | 257    | 260    | 265      | 268      |
| Production               | 4,932 | 5,128 | 5,272  | 5,433  | 5,583 | 5,724      | 5,877  | 6,035  | 6,191  | 6,348    | 6,507    |
| Disappearance            | 4,940 | 5,122 | 5,272  | 5,429  | 5,578 | 5,725      | 5,873  | 6,033  | 6,186  | 6,346    | 6,505    |
| Domestic Use             | 4,710 | 4,862 | 5,037  | 5,194  | 5,316 | 5,429      | 5,566  | 5,710  | 5,845  | 5,992    | 6,140    |
| Exports                  | 230   | 260   | 235    | 235    | 262   | 296        | 307    | 323    | 341    | 354      | 365      |
| Ending Stocks            | . 240 | 245   | 245    | 250    | 254   | 253        | 257    | 260    | 265    | 268      | 270      |
|                          |       |       |        |        |       |            |        |        |        | 5. S. S. |          |
|                          |       |       |        |        |       | (Pounds)   |        |        |        |          | ·<br>    |
| Per Capita Consumption   | 18.1  | 18.4  | 18.9   | 19.3   | .19.6 | 19.8       | 20.2   | 20.5   | 20.8   | 21.2     | 21.5     |
| Change                   | 1.7%  | 1.9%  | 2.6%   | 2.2%   | 1.4%  | 1.2%       | 1.6%   | 1.7%   | 1.5%   | 1.7%     | 1.6%     |
| Prices                   |       |       |        |        | (Cen  | ts per Pou | nd)    |        |        |          | 1. 1. F. |
| Eastern Region Wholesale | 65.69 | 64.63 | 65.31  | 65.53  | 64.05 | 64.96      | 65.47  | 66.56  | 65.51  | 65.48    | 66.21    |
| Change                   | -2.7% | -1.6% | 1.1%   | 0.3%   | -2.3% | 1.4%       | 0.8%   | 1.7%   | -1.6%  | -0.1%    | 1.1%     |
| Retail                   | 99.96 | 99.82 | 101.05 | 101.47 | 99.18 | 100.95     | 102.10 | 104.28 | 102.57 | 103.17   | 104.77   |
| Change                   | -0.1% | -0.1% | 1.2%   | 0.4%   | -2.3% | 1.8%       | 1.1%   | 2.1%   | -1.6%  | 0.6%     | 1.6%     |
| Net Returns              | 2.50  | 1.38  | 1.99   | 2.15   | 0.60  | 1.44       | 1.88   | 2.90   | 1.78   | 1.68     | 2.34     |

# U.S. Turkey Supply and Utilization

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|                            | 1994           | 1995  | 1996  | 1997  | 1998  | 1999        | 2000         | 2001  | 2002  | 2003  | 2004       |
|----------------------------|----------------|-------|-------|-------|-------|-------------|--------------|-------|-------|-------|------------|
|                            |                |       |       |       | (Mil  | lion Dozen  | )            |       |       |       |            |
| Supply                     | 6,167          | 6,257 | 6,244 | 6,290 | 6,345 | 6,449       | 6,536        | 6,578 | 6,639 | 6,733 | 6,803      |
| Beginning Stocks           | <sup></sup> 11 | 15    | 15    | 15    | 15    | 15          | 15           | 15    | 15    | 15    | 15         |
| Production                 | 6,153          | 6,238 | 6,225 | 6,271 | 6,326 | 6,430       | 6,517        | 6,559 | 6,620 | 6,714 | 6,784      |
| Imports                    | 4              | 4     | 4     | 4     | 4     | 4           | 4            | 4     | 4     | 4     | 4          |
| Disappearance              | 6,152          | 6,242 | 6,229 | 6,275 | 6,330 | 6,434       | 6,521        | 6,563 | 6,624 | 6,718 | 6,788      |
| Civilian Disappearance     | 5,165          | 5,228 | 5,191 | 5,201 | 5,224 | 5,297       | 5,354        | 5,366 | 5,397 | 5,460 | 5,500      |
| Shell Egg                  | 3,838          | 3,818 | 3,725 | 3,667 | 3,614 | 3,589       | 3,553        | 3,490 | 3,437 | 3,401 | 3,349      |
| Breaking Egg               | 1,327          | 1,409 | 1,466 | 1,534 | 1,609 | 1,707       | 1,801        | 1,875 | 1,959 | 2,059 | 2,151      |
| Hatching Egg               | 802            | 834   | 858   | 894   | 926   | 957         | 987          | 1,018 | 1,048 | 1,078 | 1,108      |
| Exports                    | 185            | 180   | 180   | 180   | 180   | 180         | 180          | 180   | 180   | 180   | 180        |
| Ending Stock               | 15             | 15    | 15    | 15    | 15    | 15          | 15           | 15    | 15    | 15    | 15         |
| Per Capita Consumption     |                |       |       |       |       | (Eggs)      |              |       |       |       |            |
| Shell Egg                  | 176.4          | 173.8 | 167.9 | 163.8 | 159.9 | 157.4       | 154.5        | 150.4 | 146.9 | 144.1 | 140.7      |
| Change                     | -0.8%          | -1.5% | -3.4% | -2.5% | -2.3% | -1.6%       | -1.9%        | -2.6% | -2.3% | -1.9% | -2.3%      |
| Breaking Egg               | 61.0           | 64.1  | 66.1  | 68.5  | 71.2  | 74.9        | 78.3         | 80.8  | 83.7  | 87.3  | 90,4       |
| Change                     | 8.9%           | 5.1%  | 3.0%  | 3.7%  | 4.0%  | 5.2%        | 4.6%         | 3.2%  | 3.6%  | 4.2%  | 3.6%       |
| Total                      | 237.4          | 237.9 | 234.0 | 232.3 | 231.1 | 232.3       | 232.7        | 231.2 | 230.6 | 231.4 | 231.1      |
| Delega                     | · .            |       |       |       |       | D           |              |       |       |       | a ser card |
| Prices                     | 07.04          | 05.00 | 70.00 | 70 70 |       | is per Doze | en)<br>ZA EA | 74.00 | 75 70 | 75.04 | 70.00      |
| N.Y. Grade A Lg. Wholesale | 67.31          | 65.00 | 70.88 | 12.18 | 73.92 | 72.04       | /1.54        | 74.20 | /5./8 | /5.34 | /0.90      |
|                            | -7.2%          | -3.4% | 9.0%  | 2.7%  | 1.6%  | -2.5%       | -0.7%        | 3.7%  | 2.1%  | -0.6% | 2.1%       |
| Snell Egg Ketall           | 86.15          | 82.54 | 87.51 | 88.55 | 88.76 | 86.07       | 84.64        | 86.14 | 80.52 | 84.94 | 85.22      |
| Unange                     | -5.5%          | -4.2% | 6.0%  | 1.2%  | 0.2%  | -3.0%       | -1./%        | 1.8%  | 0.4%  | -1.8% | 0.3%       |
| Net Returns                | -0.46          | -0.64 | 4.24  | 6.46  | 8.03  | 5.58        | 4.80         | 6.91  | 7.93  | 7.30  | 8.05       |

# U.S. Egg Supply and Utilization

### **U.S. Meat Consumption and Expenditures**

- Annual **per capita meat consumption** generally varies with total domestic production over the projection period. In 1995, annual per capita consumption increases 4.5 pounds from 1994 as the quantities of beef, broiler, and turkey all increase and pork holds steady. Per capita consumption is projected to increase through 1998 as the beef cycle peaks, then decline for a brief period, and finish the baseline about 6 pounds higher than in 1995 due to strong growth in poultry, which offsets weakness in beef and pork.
- Annual **per capita meat expenditures** are projected to increase by \$33 during the baseline as consumers continue to substitute less expensive poultry for more expensive red meat products. This substitution allows consumers to continue to receive a bargain at the meat counter.
- The **implied meat bundle price** increases by only 6 cents over the projection period as the mix of meat products continues to shift from traditional red meat products to less expensive poultry products.

#### **U.S. Livestock Production and Prices**

- **Production** of beef, pork, broilers, and turkeys increases by well over 2 billion pounds in 1995 as production of each type exceeds the 1994 level. Annual increases in total production are projected for each year for the remainder of the period, reaching over 84 billion pounds by 2004.
- Livestock prices are generally lower in 1995, with only the pork sector posting increases. By the final year of the baseline prices of all types of livestock are higher than in 1995. Export demand, production levels, and consumer demand are all factors which cause livestock prices to be strong over the projection period.

|                           | 1994   | 1995   | 1996   | 1997   | 1998   | 1999        | 2000   | 2001     | 2002     | 2003   | 2004   |
|---------------------------|--------|--------|--------|--------|--------|-------------|--------|----------|----------|--------|--------|
| Consumption               |        |        |        |        |        | (Pounds)    |        |          |          |        |        |
| Beef                      | 67.5   | 68.1   | 68.1   | 67.9   | 67.0   | 66.0        | 63.8   | 61.8     | 61.3     | 60.2   | 60.7   |
| Pork                      | 53.1   | 53.1   | 52.2   | 52.3   | 52.2   | 51.1        | 48.9   | 49.0     | 50.4     | 50.6   | 49.1   |
| Broiler                   | 70.1   | 73.7   | 76.2   | 79.0   | 80.3   | 81.0        | 82.6   | 84.0     | 85.1     | 86.5   | 87.8   |
| Turkey                    | 18.1   | 18.4   | 18.9   | 19.3   | 19.6   | 19.8        | 20.2   | 20.5     | 20.8     | 21.2   | 21.5   |
| Total                     | 208.8  | 213.3  | 215.3  | 218.5  | 219.1  | 218.0       | 215.4  | 215.3    | 217.6    | 218.5  | 219.1  |
| Change                    | 2.6%   | 2.2%   | 0.9%   | 1.5%   | 0.3%   | -0.5%       | -1.2%  | -0.0%    | 1.1%     | 0.4%   | 0.3%   |
| Expenditures              |        |        |        |        |        | (Dollars)   |        |          | e i sere |        |        |
| Beef                      | 190.96 | 189.76 | 187.85 | 182.99 | 181.54 | 182.10      | 182.54 | 182.62   | 183.87   | 181.58 | 181.30 |
| Pork                      | 105.27 | 105.59 | 108.06 | 107.60 | 105,76 | 106.79      | 108.08 | · 107.61 | 107.33   | 109.93 | 111.55 |
| Broiler                   | 63.18  | 63.61  | 66.22  | 68.56  | 69.02  | 71.09       | 75.27  | 78.61    | 78.74    | 81.07  | 84.65  |
| Turkey                    | 18.10  | 18.41  | 19.12  | 19.61  | 19.44  | 20.03       | 20.59  | 21.39    | 21.35    | 21.83  | 22.53  |
| Total                     | 377.51 | 377.37 | 381.25 | 378.77 | 375.77 | 380.01      | 386.48 | 390.22   | 391.28   | 394.41 | 400.03 |
| Change                    | 2.4%   | -0.0%  | 1.0%   | -0.7%  | -0.8%  | 1.1%        | 1.7%   | 1.0%     | 0.3%     | 0.8%   | 1.4%   |
|                           |        |        |        |        | (Dolla | ars per Pou | ind)   |          |          |        |        |
| Implied Meat Bundle Price | 1.81   | 1.77   | 1.77   | 1.73   | 1.71   | 1.74        | 1.79   | 1.81     | 1.80     | 1.81   | 1.83   |
| Change                    | -0.2%  | -2.2%  | 0.1%   | -2.1%  | -1.1%  | 1.7%        | 3.0%   | 1.0%     | -0.8%    | 0.4%   | 1.1%   |

### U.S. Per Capita Meat Consumption and Expenditures

#### U.S. Livestock Production and Prices

|   | 1994           | 1995           | 1996           | 1997           | 1998        | 1999           | 2000           | 2001           | 2002  | 2003           | 2004           |
|---|----------------|----------------|----------------|----------------|-------------|----------------|----------------|----------------|-------|----------------|----------------|
| Production  |                |                |                |                | /Dilli      | on Dounda      | •              |                |       |                |                |
| Poof  | 24.40          | 24.02          | DE AG          | 25.02          | 26.02       | 011 F 001108   | »)<br>- 24.00  | 24.44          | 22.05 |                | 24.06          |
| Pork  | 24.40<br>17.71 | 24.83<br>17.79 | 25.40<br>17.65 | 25.93<br>18.18 | 18.71       | 25.67<br>18.39 | 24.90<br>18.39 | 24.14<br>19.03 | 19.35 | 23.62<br>19.42 | 24.06<br>19.10 |
| Broiler   | 23.69          | 25.20          | 26.05          | 27.31          | 28.44       | 29.49          | 30.53          | 31.60          | 32.65 | 33.71          | 34.74          |
| Turkey  | 4.93           | 5.13           | 5.27           | 5.43           | 5.58        | 5.72           | 5.88           | 6.04           | 6.19  | 6.35           | 6.51           |
| Total   | 70.73          | 72.95          | 74.43          | 76,85          | 78,75       | 79.27          | 79.70          | 80.81          | 82.13 | 83.10          | 84.41          |
| Change  | 5.6%           | 3.1%           | 2.0%           | 3.3%           | 2.5%        | 0.7%           | 0.5%           | 1.4%           | 1.6%  | 1.2%           | 1.6%           |
| Prices  |                |                |                |                |             |                |                |                |       |                |                |
| 1100 - 1300 lb  |                |                |                |                | (Dollars pe | r Hundred      | weiaht)        |                |       |                |                |
| Nebraska Direct Steers<br>230 - 250 lb                | 68.83          | 67.08          | 64.85          | 61.49          | 63.13       | 66.80          | 72.61          | 78.15          | 81.07 | 83.31          | 80.42          |
| lowa - Southern Minnesota                             |                |                |                |                |             |                |                |                |       |                |                |
| Barrows and Gilts                                     | 40.08          | 40.93          | 44.87          | 42.24          | 38.78       | 41.80          | 47 03          | 46 81          | 43 57 | 45 52          | 49 31          |
| 12-City Wholesale Broiler<br>Eastern Region Wholesale | 55.69          | 52.85          | 54.39          | 55.59          | 54.39       | 54.98          | 56.77          | 57.75          | 57.21 | 57.50          | 58.56          |
| Turkey  | 65.69          | 64.63          | 65.31          | 65.53          | 64.05       | 64.96          | 65.47          | 66.56          | 65.51 | 65.48          | 66.21          |

## U.S. Dairy

- No weakness in demand for milk or milk products is projected to occur in the baseline, since after the first year of commercial use of **rBST**, no strong evidence has been found to suggest adverse consumer reaction to its use. Assumptions regarding adoption rates by dairy producers and additional milk production per cow drive the outlook for milk production in the baseline. It is assumed that 25 percent of all dairy cows will receive rBST injections in 1995 and that production per cow will increase an additional 1,600 pounds for those cows that receive injections. The adoption rate increases to 35 percent in 1996, 42.5 percent in 1997, and an additional 5 percent per year until 2000, at which point the adoption rate increases by 2.5 percent per year until reaching 65 percent adoption by 2004.
- The all-milk price is projected to fall by 66 cents per cwt. in 1995 to \$12.38 per cwt. Stronger milk production from the use of rBST weakens the all-milk price to \$12.26 per cwt. in 1996. Milk prices start to increase after 1996 as increases in dairy cow liquidation begin to offset the additional milk per cow associated with rBST. By 2004, milk prices reach \$12.95 per cwt. Throughout the projection period, strong cheese demand continues to add support to all-milk prices.
- Milk production is expected to expand by over 4.5 billion pounds in 1995 as milk production per cow increases by nearly 640 pounds. Largely because of rBST use, milk production increases average 1.5 percent per year throughout the forecast period.
- **Dairy cow numbers** decline to 9.6 million head in 1995. As has been the rule for several years, dairy cow numbers continue to contract over the entire baseline period, reaching 8.6 million head in 2004. Contraction is greater in the late 1990s in an effort to adjust for increases in production per cow, and begins to lessen toward 2004. Nearly half of the projected decline in dairy cow numbers over the 1995 to 2004 period can be attributed to the Upper Midwest region.
- **Government purchases** of dairy products in 1995 increase to 4.8 billion pounds on a total milk-solids basis. This purchase level includes those products exported under the Dairy Export Incentive Program (DEIP). Government removals of dairy products remain between 4.7 and 5.2 billion pounds throughout the forecast period due in large part to the additional milk produced using rBST.
- The Secretary of Agriculture cannot drop the **milk support price** below \$10.10 per cwt. and must increase it at least 25 cents per cwt. if purchases are projected to be less than 3.5 billion pounds on a total milk-solids basis plus the milk equivalent of additional imports of dairy products. Since removals never fall below the trigger level, the milk support price remains at \$10.10 per cwt. throughout the projection period. As prescribed in OBRA93, dairy assessments in 1996 fall to 10 cents per cwt. from the current level of 11.25 cents per cwt.

|                              | 1994    | 1995    | 1996    | 1997    | 1998        | 1999        | 2000        | 2001    | 2002    | 2003     | 2004                       |
|------------------------------|---------|---------|---------|---------|-------------|-------------|-------------|---------|---------|----------|----------------------------|
| · · · ·                      |         |         | ·       | (       | Million Pou | Inds Milk E | Equivalent) |         |         | <u> </u> | <u> </u>                   |
| Supply                       | 154,334 | 158,882 | 161,743 | 164,347 | 166,266     | 168,503     | 170,718     | 173,169 | 175,527 | 177,748  | 179,858                    |
| Milk Production              | 154,202 | 158,750 | 161,611 | 164,215 | 166,134     | 168,371     | 170,586     | 173,037 | 175,395 | 177,616  | 179,726                    |
| Per Cow (Pounds)             | 15,980  | 16,617  | 17,139  | 17,634  | 18,104      | 18,577      | 19,021      | 19,467  | 19,900  | 20,335   | 20,780                     |
| No. Cows (1,000)             | 9,650   | 9,553   | 9,430   | 9,312   | 9,177       | 9,063       | 8,968       | 8,889   | 8,814   | 8,734    | 8,649                      |
| Net Imports                  | 127     | 127     | 127     | 127     | 127         | 127         | 127         | 127     | 127     | 127      | 127                        |
| Net Change in Stocks         | 5       | 5       | 5       | 5       | 5           | 5           | 5           | 5       | 5       | 5        | 5                          |
| Utilization                  | 154,334 | 158,882 | 161,743 | 164,347 | 166,266     | 168,503     | 170,718     | 173,169 | 175,527 | 177,748  | 179,858                    |
| On-Farm Use                  | 1,882   | 1,865   | 1,854   | 1,853   | 1,844       | 1,836       | 1,808       | 1,786   | 1,768   | 1,749    | 1,730                      |
| Fed to Calves                | 1,452   | 1,442   | 1,446   | 1,451   | 1,442       | 1,441       | 1,433       | 1,432   | 1,431   | 1,429    | 1,426                      |
| Farm-churned Butter          | 430     | 423     | 408     | 401     | 402         | 395         | 374         | 354     | 337     | 320      | 304                        |
| Fluid Product Use            | 55,918  | 56,337  | 56,539  | 56,896  | 56,950      | 57,200      | 57,851      | 58,402  | 59,403  | 60,081   | 60,694                     |
| Whole Milk Per Capita (lbs)  | 79      | 78      | 75      | 73      | 71          | 68          | 67          | 66      | 66      | 65       | 64                         |
| Lowfat Milk Per Capita (lbs) | 110     | 110     | 110     | 111     | 111         | 112         | 112         | 113     | 113     | 114      | 115                        |
| Manufactured Use             | 93,374  | 97,520  | 100,191 | 102,439 | 104,311     | 106,307     | 107,899     | 109,821 | 111,196 | 112,758  | 114,273                    |
| Creamery Butter              | 30,889  | 33,049  | 33,612  | 34,200  | 34,454      | 34,795      | 35,074      | 35,493  | 35,794  | 36,095   | 36,312                     |
| Whey Cream                   | 4,733   | 5,065   | 5,270   | 5,445   | 5,622       | 5,801       | 5,936       | 6,085   | 6,193   | 6,314    | 6,442                      |
| Net Creamery Butter          | 26,156  | 27,984  | 28,343  | 28,755  | 28,831      | 28,994      | 29,137      | 29,408  | 29,601  | 29,781   | 29,869                     |
| Cheese                       | 50,893  | 52,980  | 55,120  | 56,956  | 58,811      | 60,675      | 62,093      | 63,646  | 64,775  | 66,045   | 67,388                     |
| Evaporated and Condensed     | 1,944   | 2,035   | 2,045   | 2,045   | 2,025       | 2,000       | 1,993       | 1,989   | 1,922   | 1,907    | 1,876                      |
| Frozen Dairy Products        | 12,293  | 12,621  | 12,815  | 12,848  | 12,840      | 12,866      | 12,936      | 13,040  | 13,159  | 13,286   | 13,401                     |
| Other Manufactured Products  | 2,088   | 1,900   | 1,868   | 1,836   | 1,803       | 1,771       | 1,739       | 1,739   | 1,739   | 1,739    | 1,739                      |
| Residual                     | 3,160   | 3,160   | 3,160   | 3,160   | 3,160       | 3,160       | 3,160       | 3,160   | 3,160   | 3,160    | 3,160                      |
| Removals (TMSB)              | 3,735   | 4,830   | 5,154   | 5,083   | 4,981       | 4,924       | 4,790       | 4,756   | 4,758   | 4,746    | 4,758                      |
| Butter                       | 1,530   | 1,996   | 2,022   | 2,154   | 2,128       | 2,110       | 2,066       | 2,053   | 2,057   | 2,128    | 2,154                      |
| Cheese                       | 0       | 0       | 0       | 0       | 0           | 0           | 0           | 0       | 0       | 0        | 0                          |
| Nonfat Dry Milk              | 2,136   | 2,765   | 3,062   | 2,859   | 2,784       | 2,744       | 2,655       | 2,633   | 2,631   | 2,548    | 2,534                      |
| Farm Prices and Returns      |         |         |         |         | (Dollars p  | er Hundre   | dweight)    |         |         |          | 1900 - 1900<br>1900 - 1900 |
| Minnesota-Wisconsin          | 12.02   | 11.31   | 11.21   | 11.30   | 11.45       | 11.66       | 11.84       | 11.97   | 12.01   | 11.92    | 11.92                      |
| Manufacturing Grade          | 11.92   | 11.20   | 11.09   | 11.19   | 11.34       | 11.56       | 11.74       | 11.88   | 11.91   | 11.82    | 11.82                      |
| Fluid Grade                  | 13.10   | 12.40   | 12.30   | 12.39   | 12.54       | 12.75       | 12.93       | 13.07   | 13.10   | 13.01    | 13.01                      |
| All Milk                     | 13.04   | 12.38   | 12.26   | 12.35   | 12.50       | 12.71       | 12.89       | 13.03   | 13.06   | 12.95    | 12.95                      |
| Support Price                | 10.10   | 10.10   | 10.10   | 10.10   | 10,10       | 10.10       | 10.10       | 10.10   | .10.10  | 10.10    | 10.10                      |
| Net Returns                  | 3.82    | 3.12    | 2.59    | 2.52    | 2.69        | 2.84        | 3.08        | 3.55    | 3.08    | 2.86     | 2.54                       |
| Assessments                  | 0.11    | 0.11    | 0.10    | 0.10    | 0.10        | 0.10        | 0.10        | 0.10    | 0.10    | 0.10     | 0.10                       |

# U.S. Milk Supply and Utilization

|                         | <u></u> 1994 | 1995    | 1996    | 1997    | 1998    | 1999        | 2000       | 2001    | 2002    | 2003    | 2004    |
|-------------------------|--------------|---------|---------|---------|---------|-------------|------------|---------|---------|---------|---------|
| · · ·                   |              | -       |         |         |         | -           |            |         |         | •       |         |
| Average Cows on Farms:  |              |         |         |         | (Th     | ousand He   | ad)        |         |         |         |         |
| Appalachian             | 547          | 513     | 483     | 456     | 429     | 408         | <b>392</b> | 379     | 367     | 356     | 344     |
| Corn Belt               | 829          | 815     | 800     | 785     | 769     | 755         | 743        | 734     | 725     | 716     | 706     |
| Upper Midwest           | 2,579        | 2,512   | 2,449   | 2,388   | 2,323   | 2,265       | 2,213      | 2,167   | 2,122   | 2,078   | 2,033   |
| Northeast               | 1,956        | 1,901   | 1,853   | 1,806   | 1,755   | 1,710       | 1,668      | 1,629   | 1,593   | 1,557   | 1,522   |
| Pacific                 | 1,697        | 1,745   | 1,780   | 1,814   | 1,841   | 1,868       | 1,895      | 1,921   | 1,948   | 1,974   | 1,998   |
| Southeast               | 282          | 283     | 286     | 288     | 288     | 288         | 288        | 288     | 287     | 286     | 285     |
| Southern Plains         | 398          | 399     | 393     | 387     | 381     | 379         | 377        | 375     | 373     | 371     | 369     |
| Other States            | 1,361        | 1,385   | 1,387   | 1,389   | 1,390   | 1,392       | 1,393      | 1,396   | 1,399   | 1,397   | 1,393   |
| United States           | 9,650        | 9,553   | 9,430   | 9,312   | 9,177   | 9,063       | 8,968      | 8,889   | 8,814   | 8,734   | 8,649   |
| United States, Jan. 1   | 9,623        | 9,460   | 9,375   | 9,225   | 9,102   | 8,998       | 8,911      | 8,838   | 8,761   | 8,678   | 8,590   |
| Milk Production per Cow |              |         |         |         |         | (Pounds)    |            |         |         |         |         |
| Appalachian             | 13,238       | 13,921  | 14,331  | 14,736  | 15,124  | 15,505      | 15,858     | 16,195  | 16,512  | 16,817  | 17,127  |
| Corn Belt               | 14,353       | 14,938  | 15,383  | 15,801  | 16,194  | 16,585      | 16,947     | 17,306  | 17,656  | 18,002  | 18,353  |
| Upper Midwest           | 15,237       | 15,802  | 16,266  | 16,703  | 17,112  | 17,525      | 17,909     | 18,286  | 18,655  | 19,014  | 19,383  |
| Northeast               | 15,775       | 16,437  | 16,914  | 17,355  | 17,774  | 18,191      | 18,582     | 18,969  | 19,351  | 19,733  | 20,123  |
| Pacific                 | 19,820       | 20,346  | 20,956  | 21,536  | 22,080  | 22,641      | 23,178     | 23,725  | 24,268  | 24,811  | 25,358  |
| Southeast               | 14,937       | 15,753  | 16,210  | 16,668  | 17,109  | 17,518      | 17,905     | 18,284  | 18,653  | 19,027  | 19,400  |
| Southern Plains         | 15,658       | 16,302  | 16,772  | 17,219  | 17,647  | 18,083      | 18,488     | 18,887  | 19,274  | 19,652  | 20,041  |
| Other States            | 15,300       | 15,900  | 16,366  | 16,803  | 17,221  | 17,643      | 18,033     | 18,446  | 18,805  | 19,189  | 19,577  |
| United States           | 15,980       | 16,617  | 17,139  | 17,634  | 18,104  | 18,577      | 19,021     | 19,467  | 19,900  | 20,335  | 20,780  |
| Milk Production         | · ·          |         |         |         | (Mi     | llion Pound | ls)        |         | · · ·   | •••     |         |
| Appalachian             | 7,248        | 7,144   | 6,920   | 6,720   | 6,483   | 6,320       | 6,215      | 6,135   | 6,062   | 5,982   | 5,896   |
| Corn Belt               | 11,897       | 12,171  | 12,300  | 12,409  | 12,446  | 12,515      | 12,594     | 12,695  | 12,795  | 12,883  | 12,956  |
| Upper Midwest           | 39,303       | 39,691  | 39,828  | 39,886  | 39,758  | 39,701      | 39,640     | 39,618  | 39,592  | 39,511  | 39,397  |
| Northeast               | 30,851       | 31,245  | 31,333  | 31,340  | 31,200  | 31,099      | 30,987     | 30,900  | 30,817  | 30,726  | 30,627  |
| Pacific                 | 33,634       | 35,508  | 37,306  | 39,072  | 40,651  | 42,289      | 43,913     | 45,586  | 47,274  | 48,968  | 50,670  |
| Southeast               | 4,207        | 4,461   | 4,633   | 4,798   | 4,922   | 5,040       | 5,151      | 5,258   | 5,356   | 5,446   | 5,524   |
| Southern Plains         | 6,234        | 6,500   | 6,585   | 6,659   | 6,732   | 6,853       | 6,968      | 7,085   | 7,197   | 7,298   | 7,392   |
| Other States            | 20,830       | 22,030  | 22,705  | 23,332  | 23,942  | 24,554      | 25,118     | 25,759  | 26,302  | 26,803  | 27,263  |
| United States           | 154,202      | 158,750 | 161,611 | 164,215 | 166,134 | 168,371     | 170,586    | 173,037 | 175,395 | 177,616 | 179,726 |

# U.S. and Regional Dairy Supply

### **U.S. Dairy Products**

- The wholesale price of cheese is expected to decrease in 1995 by one cent per pound from the 1994 level. Throughout the baseline period, however, the wholesale cheese price runs well above the CCC purchase price for cheese, which remains at \$1.12 per pound. The increase in wholesale cheese prices tends to lend support to the allmilk price over the baseline period.
- Annual **per capita consumption of cheese** is projected to continue showing year-over-year increases throughout the projection period, exceeding 35 pounds per person by 2004. Any weakness in cheese demand during the baseline period will result in lower cheese prices and thus lower milk prices.
- The wholesale butter price is expected to remain at about 67 cents per pound in 1995. Over the projection period, wholesale butter prices remain within 2 cents per pound of the CCC purchase price since CCC removals of butter continue.
- Annual **per capita butter consumption** is expected to remain relatively constant throughout the baseline period. Per capita butter consumption increases from the current level of 4.44 pounds in 1994 to 4.56 pounds by 2004. The last tilt in butter/powder prices which lowered the butter purchase price to 65 cents per pound has resulted in some additional commercial disappearance of butter which is expected to continue in the baseline.
- Wholesale **nonfat dry milk prices** remain 2 to 5 cents above the CCC purchase price throughout the baseline. These prices are not expected to be quite as strong as current levels due, in part, to the current GATT agreement which requires a decrease in nonfat dry milk that is exported under the DEIP.
- Nonfat dry milk production increased by over 200 million pounds in 1994 relative to 1993. The baseline shows that nonfat dry milk production is expected to continue at the current pace over the projection period.

12.10

|                        | 1994   | 1995         | 1996   | 1997   | 1998   | 1999        | 2000   | 2001   | 2002   | 2003   | 2004   |
|------------------------|--------|--------------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|
|                        |        |              |        |        | (Mil   | lion Pound  | is)    |        |        |        |        |
| Supply                 | 7,522  | 7,794        | 8,148  | 8,466  | 8,790  | 9,141       | 9,435  | 9,741  | 9,992  | 10,267 | 10,557 |
| Beginning Stocks       | 466    | 401          | 401    | 401    | 401    | 401         | 401    | 401    | 401    | 401    | 401    |
| Production             | 6,715  | 7,095        | 7,437  | 7,743  | 8,055  | 8,393       | 8,675  | 8,981  | 9,232  | 9,507  | .9,797 |
| Imports                | 341    | 298          | 310    | 322    | 335    | 347         | 359    | 359    | 359    | 359    | 359    |
| Utilization            | 7,122  | 7,393        | 7,747  | 8,065  | 8,389  | 8,740       | 9,034  | 9,340  | 9,591  | 9,866  | 10,156 |
| Foreign Use            | 79     | 82           | 82     | 82     | 82     | 82          | 82     | 82     | 82     | 82     | 82     |
| Exports                | 33     | 36           | 36     | 36     | 36     | 36          | 36     | 36     | 36     | 36     | 36     |
| Shipments              | 46     | 46           | 46     | 46     | 46     | 46          | 46     | 46     | 46     | 46     | 46     |
| Domestic Use           | 7,043  | 7,311        | 7,665  | 7,983  | 8,307  | 8,658       | 8,952  | 9,258  | 9,509  | 9,784  | 10,074 |
| Commercial             | 7,043  | 7,311        | 7,665  | 7,983  | 8,307  | 8.658       | 8.952  | 9.258  | 9,509  | 9,784  | 10.074 |
| Government Donations   | 0      | 0            | . 0    | 0      | 0      | , 0         | 0      | 0      | 0.     | 0      | 0      |
| Ending Stocks          | 401    | 401          | 401    | 401    | 401    | 401         | 401    | 401    | 401    | 401    | 401    |
| Commercial             | 400    | 400          | 400    | 400    | 400    | 400         | 400    | 400    | 400    | 400    | 400    |
| Government             | 1      | 1            | . 1    | . 1    | 100    | 1           | · 1    | 1      | 1      | 1      | 1      |
| Carry-in               | . 2    | 1            | . 1    | 1      | 1      | 1           | 1      | 1      | 1      | 1      | 1      |
| Removals               | 10     | 10           | 10     | 10     | 10     | 10          | 10     | 10     | 10     | 10     | 10     |
| DEIP                   | 6      | 4            | 4      | 4      | 4      | 4           | . 4    | 4      | 4      | 4      | 4      |
| Domestic Donations     | Õ      | 0            | . 0    | Ó      | 0      | 0           | 0      | O      | 0      | Ó      | 0      |
| Other Disappearance    | 11     | 10           | 10     | 10     | 10     | 10          | 10     | 10     | 10     | 10     | 10     |
|                        |        |              | · .    |        |        | (Pounds)    |        |        |        |        |        |
| Per Capita Consumption | 27.0   | 27.7         | 28.8   | 29.7   | 30.6   | 31.6        | 32.4   | 33.3   | 33.9   | 34.6   | 35.3   |
| Prices                 |        |              |        |        | (Cen   | its per Pou | und)   |        |        |        |        |
| Wholesale 40 lb Block  | 132.40 | 131.03       | 131.61 | 131.56 | 131.87 | 133.06      | 133.05 | 133.14 | 133.62 | 132.21 | 132.32 |
| CCC Price              | 112.03 | 112.03       | 112.03 | 112.03 | 112.03 | 112.03      | 112.03 | 112.03 | 112.03 | 112.03 | 112.03 |
|                        | a (-   | <b>•</b> • - |        |        | (Dolla | ars per Po  | und)   |        | <br>   |        |        |
| Retail                 | 3.07   | 3.03         | 3.05   | 3.05   | 3.05   | 3.08        | 3.08   | 3.09   | 3.10   | 3.06   | 3.07   |

# U.S. Total Cheese Supply and Utilization

|                        | 1994   | 1995   | 1996   | 1997   | 1998   | 1999       | 2000   | 2001   | 2002   | 2003   | 2004   |
|------------------------|--------|--------|--------|--------|--------|------------|--------|--------|--------|--------|--------|
|                        |        |        | ·····  |        | (Mil   | lion Pound | s)     |        |        |        |        |
| Supply                 | 1.290  | 1.392  | 1.488  | 1.587  | 1.658  | 1.705      | 1.743  | 1.775  | 1,793  | 1.808  | 1.807  |
| Beginning Stocks       | 90     | 135    | 212    | 289    | 365    | 403        | 443    | 468    | 485    | 502    | 507    |
| Production             | 1,199  | 1.254  | 1 270  | 1 291  | 1 284  | 1 292      | 1.288  | 1,295  | 1,296  | 1.294  | 1.288  |
| Imports                | 1.     | 3      | 5      | 7      | 9      | 10         | 12     | 12     | 12     | 12     | 12     |
| Utilization            | 1,133  | 1,130  | 1,128  | 1,121  | 1,130  | 1,137      | 1,140  | 1,150  | 1,151  | 1,161  | 1,157  |
| Foreign Use            | 268    | 265    | 247    | 229    | 232    | 224        | 216    | 216    | 216    | 216    | 216    |
| Exports                | 264    | 261    | 243    | 225    | 228    | 220        | 212    | 212    | 212    | 212    | 212    |
| Shipments              | 4      | 4      | 4      | 4      | 4      | 4          | 4      | 4      | 4      | 4      | 4      |
| Domestic Use           | 845    | 847    | 863    | 874    | 880    | 895        | 906    | 916    | 917    | 927    | 922    |
| Commercial             | 823    | 797    | 793    | 774    | 755    | 770        | 771    | 776    | 777    | 787    | 782    |
| Government Donations   | 22     | 50     | 70     | 100    | 125    | 125        | 135    | 140    | 140    | 140    | 140    |
| Feed and Waste         | 20     | 18     | 18     | 18     | 18     | 18         | 18     | 18     | 18     | 18     | 18     |
| Ending Stocks          | 135    | 212    | 289    | 365    | 403    | 443        | 468    | 485    | 502    | 507    | 510    |
| Commercial             | 105.   | 105    | 105    | 105    | 105    | 105        | 105    | 105    | 105    | 105    | 105    |
| Government             | 30     | 107    | 184    | 260    | 298    | 338        | 363    | 380    | 397    | 402    | 405    |
| Carry-in               | 10     | 30     | 107    | 184    | 260    | 298        | 338    | 363    | 380    | 397    | 402    |
| Removals               | 302    | 391    | 433    | 404    | 394    | 388        | 375    | 372    | 372    | 360    | 358    |
| DEIP                   | 234    | 239    | 221    | 203    | 186    | 168        | 150    | 150    | 150    | 150    | 150    |
| Domestic Donations     | 22     | 50     | 70     | 100    | 125    | 125        | 135    | 140    | 140    | 140    | 140    |
| Other Disappearance    | 260    | 264    | 286    | 228    | 231    | 223        | 215    | 215    | 215    | 215    | 215    |
|                        |        |        |        |        |        | (Pounds)   |        |        |        |        |        |
| Per Capita Consumption | 3.24   | 3.21   | 3.24   | 3.25   | 3.25   | 3.27       | 3.28   | 3.29   | 3.27   | 3.27   | 3.23   |
| Prices                 |        |        |        |        | (Cen   | ts per Pou | nd)    |        |        |        |        |
| Wholesale              | 108.08 | 106.50 | 104.68 | 104.77 | 104.78 | 105.78     | 106.33 | 107.11 | 108.27 | 105.73 | 107.60 |
| CCC Price              | 103.40 | 103.40 | 103.40 | 103.40 | 103.40 | 103.40     | 103.40 | 103.40 | 103.40 | 103.40 | 103.40 |

## U.S. Nonfat Dry Milk Supply and Utilization

|                        | 1994     | 1995  | 1996  | 1997  | 1998   | 1999        | 2000  | 2001  | 2002  | 2003  | 2004  |
|------------------------|----------|-------|-------|-------|--------|-------------|-------|-------|-------|-------|-------|
|                        |          |       |       |       | (Mill  | lion Pounds | 5)    |       |       |       |       |
| Supply                 | 1,547    | 1,463 | 1,491 | 1,523 | 1,556  | 1,590       | 1,609 | 1,604 | 1,605 | 1,604 | 1,600 |
| Beginning Stocks       | 243      | 55    | 57    | 62    | 82     | 99          | 104   | 99    | 88    | 74    | 61    |
| Production             | 1,300    | 1,391 | 1,415 | 1,440 | 1,450  | 1,465       | 1,477 | 1,476 | 1,489 | 1,502 | 1,511 |
| Imports                | 3        | 17    | 19    | 21    | 24     | 26          | 29    | 29    | 29    | 29    | 29    |
| Utilization            | 1.421    | 1.366 | 1,389 | 1.401 | 1.417  | 1,436       | 1.455 | 1.457 | 1.469 | 1.473 | 1.479 |
| Total Foreign Use      | 261      | 176   | 176   | 176   | 176    | 176         | 176   | 176   | 176   | 176   | 176   |
| Exports                | 260      | 175   | 175   | 175   | 175    | 175         | 175   | 175   | 175   | 175   | 175   |
| Shipments              | 1        | 1     | 1     | 1     | 1      | 1           | 1     | 1     | 1     | 1     | 1     |
| Domestic Use           | 1,160    | 1,190 | 1.213 | 1,225 | 1.241  | 1 260       | 1 279 | 1 281 | 1 293 | 1 297 | 1 303 |
| Commercial             | 1.090    | 1,150 | 1.173 | 1.185 | 1.201  | 1.210       | 1.224 | 1.221 | 1.230 | 1.227 | 1.233 |
| Government Donations   | 70       | × 40  | 40    | 40    | 40     | 50          | 55    | 60    | 63    | 70    | 70    |
|                        |          |       |       |       |        |             |       |       |       |       |       |
| Ending Stocks          | 55       | 57    | 62    | 82    | 99     | 104         | 99    | 88    | 74    | 61    | 51    |
| Commercial             | 10       | 10    | 10    | 10    | 10     | 10          | 10    | 10    | 10    | 10    | 10    |
| Government             | 45       | 47    | 52    | 72    | 89     | 94          | 89    | 78    | 64    | 51    | 41    |
| Carry-in               | 229      | 45    | 47    | 52    | 72     | 89          | 94    | 89    | 78    | 64    | 51    |
| Removals               | 174      | 227   | 230   | 245   | 242    | 240         | 235   | 234   | 234   | 242   | 245   |
| DEIP                   | 73       | 70    | 70    | 70    | 65     | 56          | 46    | 46    | 46    | 46    | 46    |
| Domestic Donations     | 70       | 40    | - 40  | 40    | 40     | 50          | 55    | 60    | 63    | 70    | 70    |
| Other Disappearance    | 288      | 185   | 185   | 185   | 185    | 185         | 185   | 185   | 185   | 185   | 185   |
|                        |          | ~     |       |       | (      | (Pounds)    |       |       |       |       |       |
| Per Capita Consumption | 4.44     | 4.51  | 4.56  | 4.56  | 4.58   | 4.61        | 4.63  | 4.60  | 4.60  | 4.58  | 4.56  |
| Prices                 |          |       |       |       | (Cent  | ts per Pour | nd)   |       |       |       |       |
| Wholesale              | 67.09    | 67.01 | 65.16 | 66.54 | 65 44  | 66.16       | 66.39 | 66.33 | 66.49 | 65.78 | 65.54 |
| CCC Price              | 65.00    | 65.00 | 65.00 | 65.00 | 65.00  | 65.00       | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 |
|                        | <i>t</i> |       |       |       | (Dolla | rs ner Pou  | nd)   |       |       |       | ,     |
| Retail                 | 1.60     | 1.60  | 1.57  | 1.59  | 1.58   | 1.59        | 1.59  | 1.59  | 1.59  | 1.58  | 1.58  |

n

## U.S. Butter Supply and Utilization

# **Aggregate Measures**

• U.S. Land Use

- U.S. Net Returns for Eight Crops
- U.S. Agricultural Exports
- U.S. Government Costs
- U.S. Cash Receipts from Farm Marketings
- U.S. Farm Production Expenses
- U.S. Net Farm Income

## U.S. Land Use

- Under the 1993 Budget Reconciliation Package, **CRP enrollment** is capped at 38 million acres. Through 12 sign-ups, enrollment for 1994/95 stands at 36.4 million acres with 23.3 million acres coming from base reductions of program commodities. Wheat base acreage represents the largest single commodity contribution with 10.8 million acres enrolled by 1994/95.
- As **CRP** contracts begin to expire in 1997/98, it is assumed that a portion of the contracts are extended. Following the assumptions of the Congressional Budget Office, 15 million acres were assumed to be extended through the year 2000/01. These acres, along with the 1.6 million acres assumed to be enrolled in 1996/97, and the 1.3 million acres extended after 2001/02, give a total of 17.7 million acres in 2003/04.
- Given the price paths of program crops, flex acreage is projected to continue shifting into soybeans and minor oilseeds and out of feed grains and food grains. Flexible acreage is projected to continue shifting into cotton throughout the projection period.
- The 0-85 and 50-85 programs, formerly 0-92 and 50-92, are expected to continue to attract acreage, throughout the baseline. Acreage enrolled in these programs will remain fairly stable through 1995, but then increase slightly thereafter as a portion of the CRP contracts expire. The increase is tempered somewhat by increasing crop prices.
- Total **area planted** to 15 principal crops increased in 1994/95 due to low or zero ARP rates in program crops and favorable prices in most crops. With relatively high prices in wheat and cotton and 0 percent ARP rates for all commodities except rice and corn, planted area will decrease by only 2.6 million acres in 1995/96. By 2003/04, planted area reaches 277.3 million acres.
- Total **area idled** in government programs decreases by 9.5 million acres in 1994/95 with much of the decrease coming in the ARP program. Idled area is projected to decline throughout the baseline due to CRP contracts expiring.
- Summing across planted and idled area, the **total area** devoted to 15 principal crops is projected to increase through 1996/97 as both planted and idled area are expected to be above 1994/95 levels. Beginning in 1997/98 with the expiration of CRP contracts, total area decreases as some of the CRP acres do not return to production or annual idled programs.

|                       | 93/94 | 94/95 | 95/96 | 96/97 | 97/98 | 98/99      | 99/00 | 00/01  | 01/02 | 02/03 | 03/04 |
|-----------------------|-------|-------|-------|-------|-------|------------|-------|--------|-------|-------|-------|
|                       |       |       |       |       | (Mil  | lion Acres | 1     |        |       |       |       |
| Wheat                 | 10.83 | 10.83 | 10.83 | 10.83 | 8.39  | 6.67       | 5.42  | 4.56   | 4.50  | 4.36  | 4.23  |
| Corn                  | 4.29  | 4.29  | 4.29  | 4.29  | 3.66  | 3.52       | 3.38  | - 3.26 | 3.24  | 3.19  | 3.12  |
| Sorghum               | 2.47  | 2.47  | 2.47  | 2.47  | 1.76  | 1.40       | 1.23  | 1.11   | 1.09  | 1.07  | 1.04  |
| Barley                | 2.83  | 2.83  | 2.83  | 2.83  | 2.04  | 1.48       | 1.13  | 0.85   | 0.83  | 0.80  | 0.78  |
| Oats                  | 1.40  | 1.40  | 1.40  | 1.40  | 0.88  | 0.53       | 0.30  | 0.10   | 0.08  | 0.04  | 0.00  |
| Cotton                | 1.43  | 1.43  | 1.43  | 1.43  | 1.14  | 1.00       | 0.92  | 0.88   | 0.87  | 0.85  | 0.82  |
| Rice                  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01       | 0.01  | 0.00   | 0.00  | 0.00  | 0.00  |
| Total Base Reductions | 23.27 | 23.27 | 23.27 | 23.27 | 17.89 | 14.61      | 12.37 | 10.76  | 10.62 | 10.31 | 10.00 |
| Reduced Soybean Area  | 4.16  | 4.16  | 4.16  | 4.16  | 3,68  | 3.47       | 3.32  | 3.22   | 3.20  | 3.15  | 3.10  |
| Other                 | 8.99  | 8.99  | 8.99  | 10.57 | 8.11  | 6.55       | 5.71  | 5.09   | 4.99  | 4.79  | 4.56  |
| Total CRP Area        | 36.42 | 36.42 | 36.42 | 38.00 | 29.68 | 24.63      | 21.40 | 19.08  | 18.81 | 18.25 | 17.66 |

#### **Base Reductions Attributable to the Conservation Reserve Program**

#### U.S. Net Flexed Area

|                | 93/94 | 94/95  | 95/96 | 96/97 | 97/98 | 98/99      | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 |
|----------------|-------|--------|-------|-------|-------|------------|-------|-------|-------|-------|-------|
| · ·            | 00/01 | 0 1/00 | 00/00 | 00101 | 01100 | 00,00      | 00,00 | 00/01 | UNUL  | 02.00 | 00,01 |
|                |       |        | ***** | f .   |       |            |       |       |       |       |       |
|                |       |        |       |       | (Mill | ion Acres) |       |       |       |       |       |
| Wheat          | -2.22 | -2.36  | -1.76 | -2.04 | -2.27 | -2.33      | -2.39 | -2.31 | -2.18 | -2.25 | -2.23 |
| Corn           | -3.00 | -4.26  | -3,35 | -2.94 | -3.13 | -3.41      | -3.16 | -3.24 | -3.24 | -3.17 | -3.32 |
| Sorghum        | -0.25 | -0.32  | -0.38 | -0.24 | -0.28 | -0.35      | -0.29 | -0.30 | -0.31 | -0.28 | -0.29 |
| Barley         | -0.52 | -0.58  | -0.57 | -0.49 | -0.52 | -0.59      | -0.61 | -0.65 | -0.68 | -0.68 | -0.69 |
| Oats           | -0.27 | -0.26  | -0.27 | -0.24 | -0.23 | -0.25      | -0.26 | -0.27 | -0.27 | -0.26 | -0.27 |
| Rice           | -0.31 | -0.28  | -0.31 | -0.31 | -0.31 | -0.31      | -0.31 | -0.32 | -0.32 | -0.32 | -0.32 |
| Cotton         | 0.14  | 0.19   | 0.27  | 0.22  | 0.22  | 0.22       | 0.18  | 0.14  | 0.10  | 0.11  | 0.06  |
| Soybeans       | 4.72  | 5.91   | 4.68  | 4.38  | 4.77  | 5.17       | 4.98  | 5.05  | 5.02  | 4.98  | 5.17  |
| Minor Oilseeds | 0.43  | 0.46   | 0.41  | 0.41  | 0.44  | 0.48       | 0.50  | 0.50  | 0.49  | 0.49  | 0.49  |
| Other Crops    | 3.83  | 4.04   | 3.82  | 3.78  | 3.93  | 4.06       | 4.11  | 4.13  | 4.10  | 4.12  | 4.12  |

#### U.S. 0-92/85, 50-92/85 Area

| ,       | 93/94 | 94/95 | 95/96 | 96/97 | 97/98 | 98/99      | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 |
|---------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|
|         |       |       |       |       | (Mill | ion Acres) |       |       |       |       |       |
| Wheat   | 5.67  | 5.18  | 5.18  | 5.51  | 5.77  | 5.89       | 6.05  | 5.97  | 5.72  | 5.74  | 5.68  |
| Corn    | 3.97  | 2.35  | 2.87  | 2.49  | 2.64  | 3.03       | 2.76  | 2.88  | 2.81  | 2.71  | 2.83  |
| Sorahum | 1.68  | 1.61  | 1.80  | 1.60  | 1.75  | 1.93       | 1.87  | 1.87  | 1.85  | 1.77  | 1.79  |
| Barley  | 2.50  | 2.66  | 2.47  | 1.96  | 2.18  | 2.82       | 3.01  | 3.16  | 3.21  | 3.16  | 3.21  |
| Oats    | 0.85  | 0.57  | 0.77  | 0.71  | 0.69  | 0.78       | 0.82  | 0.84  | 0.83  | 0.82  | 0.83  |
| Rice    | 0.47  | 0.26  | 0.43  | 0.47  | 0.48  | 0.49       | 0.49  | 0.50  | 0.49  | 0.51  | 0.51  |
| Cotton  | 0.37  | 0.23  | 0.34  | 0.36  | 0.35  | 0.33       | 0.34  | 0.35  | 0.36  | 0.35  | 0.36  |

|                    |     | 93/94  | 94/95 | 95/96 | 96/97 | 97/98 | 98/99      | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 |
|--------------------|-----|--------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|
| · · ·              |     |        |       | _ N   |       | (Mill | ion Acres) |       |       |       |       |       |
| 15-Crop Total Area |     | 317.6  | 313.4 | 315.6 | 318.1 | 314.7 | 312.6      | 311.4 | 311.1 | 311.8 | 311.3 | 311.6 |
| Planted            |     | 257.4  | 262.7 | 260.1 | 263.8 | 267.1 | 267.9      | 269.9 | 273.4 | 274.7 | 276.6 | 277.3 |
| Payment            |     | 121.4  | 127.8 | 124.7 | 126.6 | 129.3 | 130.9      | 131.1 | 133.2 | 132.5 | 133.6 | 133.4 |
| Non-Payment        |     | 136.0  | 134.9 | 135.4 | 137.2 | 137.8 | 137.0      | 138.9 | 140.2 | 142.2 | 143.0 | 143.9 |
| Idled              |     | 60.3   | 50.8  | 55.5  | 54.4  | 47.6  | 44.7       | 41.5  | 37.7  | 37.1  | 34.7  | 34.3  |
| ARP, PLD, 0-92/85  |     | 23.8   | 14.3  | 19.1  | 16.4  | 17.9  | 20.1       | 20.1  | 18.6  | 18.3  | 16.4  | 16.6  |
| CRP                |     | 36.4   | 36.4  | 36.4  | 38.0  | 29.7  | 24.6       | 21.4  | 19.1  | 18.8  | 18.2  | 17.7  |
| Wheat Total Area   |     | 88.7   | 86.4  | 87.1  | 87.4  | 86.3  | 85.9       | 85.5  | 86.2  | 87.2  | 86.8  | 87.3  |
| Planted            | · . | 72.2   | 70.4  | 71.1  | 71.1  | 72.1  | 73.3       | 74.1  | 75.7  | 76.9  | 76.7  | 77.4  |
| Payment            |     | 50.6   | 49.9  | 49.4  | 50.1  | 52.3  | 53.7       | 54.2  | 54.5  | 54.2  | 54.1  | 54.0  |
| Non-Payment        |     | 21.6   | 20.6  | 21.7  | 21.0  | 19.9  | 19.6       | 19.8  | 21.2  | 22.7  | 22.7  | 23.4  |
| ARP, PLD, 0-92/85  |     | 5.7    | 5.2   | 5.2   | 5.5   | 5.8   | 5.9        | 6.1   | 6.0   | 5.7   | 5.7   | 5.7   |
| CRP                |     | 10.8   | 10.8  | 10.8  | 10.8  | 8.4   | 6.7        | 5.4   | 4.6   | 4.5   | 4.4   | 4.2   |
| Corn Total Area    |     | 88.1   | 85.8  | 88.0  | 89.2  | 88.7  | 88.1       | 88.9  | 88.7  | 88.7  | 88.8  | 88.3  |
| Planted            |     | 73.2   | 79.2  | 75.8  | 79.1  | 79.1  | 78.2       | 79.4  | 80.9  | 80.9  | 82.9  | 82.4  |
| Payment            |     | 46.0   | 53.7  | 48.6  | 49.7  | 50.2  | 50.8       | 50.3  | 52.2  | 51.9  | 53.4  | 53.3  |
| Non-Payment        |     | 27.2   | 25.5  | 27.2  | 29.4  | 28.8  | 27.4       | 29.0  | 28.7  | 29.0  | 29.5  | 29.1  |
| ARP, PLD, 0-92/85  |     | 10.6   | 2.3   | 7.9   | 5.8   | 6.0   | 6.4        | 6.1   | 4.6   | 4.5   | 2.7   | 2.8   |
| CRP                |     | 4.3    | 4.3   | 4.3   | 4.3   | 3.7   | 3.5        | 3.4   | 3.3   | 3.2   | 3.2   | 3.1   |
| Sorghum Total Area |     | . 14.6 | 13.8  | 14.1  | 14.6  | 14.4  | 14.2       | 14.4  | 14.3  | 14.3  | 14.2  | 14.2  |
| Planted            |     | 9.9    | 9.8   | 9.9   | 10.5  | 10.9  | 10.9       | 11.3  | 11.3  | 11.3  | 11.4  | 11.4  |
| Payment            |     | 6.1    | 6.1   | 6.7   | 6.4   | 6.9   | 7.2        | 7.2   | 7.2   | 7.1   | 7.0   | 7.0   |
| Non-Payment        |     | 3.8    | 3.7   | 3.1   | 4.1   | 4.1   | 3.7        | 4.1   | 4.2   | 4.2   | 4.4   | 44    |
| ARP, PLD, 0-92/85  |     | 2.2    | 1.6   | 1.8   | 1.6   | 1.7   | 1.9        | 1.9   | 1.9   | 1.8   | 1.8   | 1.8   |
| CRP                |     | 2.5    | 2.5   | 2.5   | 2.5   | 1.8   | 1.4        | 1.2   | 11    | 1:1   | 1.1   | 1.0   |
| Barley Total Area  |     | 13.2   | 12.7  | 12.7  | 13.0  | 12.9  | 12.8       | 12.7  | 12.5  | 12.4  | 12.4  | 12.4  |
| Planted            | •   | 7.8    | 7.2   | 7.4   | 8.2   | 8.7   | 8.5        | 8.5   | 8.5   | 8.4   | 8.4   | 8.4   |
| Payment            |     | 4.6    | 4.4   | 4.7   | 5.0   | 5.2   | 5.1        | 5.1   | 5.1   | ` 5.0 | 5.0   | 5.0   |
| Non-Payment        |     | 3.2    | 2.7   | 2.7   | 3.2   | 3.5   | 3.4        | 3.5   | 3.4   | 3.3   | 3.4   | 3.4   |
| ARP, PLD, 0-92/85  |     | 2.5    | 2.7   | 2.5   | 2.0   | 2.2   | 2.8        | 3.0   | 3.2   | 3.2   | 3.2   | 3.2   |
| CRP                |     | 2.8    | 2.8   | 2.8   | 2.8   | 2.0   | 1.5        | 1.1   | 0.9   | 0.8   | 0.8   | . 0.8 |
| Oats Total Area    |     | 10.2   | 8.6   | 9.3   | 9.0   | 8.8   | 8.5        | 8.3   | 8.0   | 8.0   | 7.7   | 7.7   |
| Planted            |     | 7.9    | 6.6   | 7.2   | 6.9   | 7.2   | 7.2        | 7.2   | 7.0   | 7.0   | 6.9   | 6.9   |
| Payment            |     | 1.4    | 1.1   | 1.4   | 1.3   | 1.3   | 1.4        | 1.5   | 1.5   | 1.4   | 1.4   | 1.4   |
| Non-Payment        |     | 6.5    | 5.5   | 5.8   | 5.6   | 5.9   | 5.8        | 5.7   | 5.5   | 5.6   | 5.5   | 5.5   |
| ARP, PLD, 0-92/85  |     | 0.8    | 0.6   | 0.8   | 0.7   | 0.7   | 0.8        | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   |
| CRP                |     | 1.4    | 1.4   | 1.4   | 1.4   | 0.9   | 0.5        | 0.3   | 0.1   | 0.1   | 0.0   | 0.0   |
| Soybean Total Area |     | 64.3   | 66.1  | 63.7  | 63.4  | 64.5  | 65.6       | 65.3  | 65.7  | 65.9  | 65.9  | 66.6  |
| Planted            |     | 60.1   | 61.9  | 59.5  | 59.3  | 60.8  | 62.1       | 62.0  | 62.4  | 62.7  | 62.7  | 63.5  |
| CRP                |     | 4.2    | 4.2   | 4.2   | 4.2   | 3.7   | 3.5        | 3.3   | 3.2   | 3.2   | 3.2   | 3.1   |

# U.S. Planted and Idled Area

|                    |     | 93/94 | 94/95 | 95/96 | 96/97 | 97/98 | 98/99       | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 |
|--------------------|-----|-------|-------|-------|-------|-------|-------------|-------|-------|-------|-------|-------|
|                    |     |       |       |       |       | (Míl  | lion Acres) |       |       |       |       |       |
| Cotton Total Area  |     | 16.0  | 16.7  | 17.4  | 16.8  | 16.7  | 16.6        | 16.4  | 16.2  | 16.1  | 16.3  | 16.1  |
| Planted            |     | 13.2  | 13.6  | 15.7  | 15.0  | 14.5  | 13.9        | 13.7  | 13.6  | 13.5  | 13.7  | 13.5  |
| Payment            |     | 10.1  | 9.7   | 11.2  | 11.2  | 10.5  | 9.8         | 9.9   | 9.9   | 9.9   | 9.8   | 9,9   |
| Non-Payment        |     | 3.2   | 3.9   | 4.5   | 3.8   | 3.9   | 4.1         | 3.8   | 3.7   | 3.6   | 3.9   | 3.6   |
| ARP, PLD, 50-92/85 |     | 1.4   | 1.7   | 0.3   | 0.4   | 1.0   | 1.7         | 1.7   | 1.7   | 1.8   | 1.7   | 1.7   |
| CRP                |     | 1.4   | 1.4   | 1.4   | 1.4   | 1.1   | 1.0         | 0.9   | 0.9   | 0.9   | 0.9   | 0.8   |
| Rice Total Area    |     | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   | 3.6         | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   |
| Planted            |     | 2.9   | 3.4   | 3.0   | 3.1   | - 3.1 | 3.1         | 3.1   | 3.1   | 3.1   | 3.1   | 3.1   |
| Payment            |     | 2.7   | 3.0   | 2.7   | 2.9   | 2.9   | 2.9         | 2.9   | 2.9   | 2.9   | 2.9   | 2.8   |
| Non-Payment        |     | 0.2   | 0.3   | 0.3   | 0.2   | 0.2   | 0.3         | 0.3   | 0.3   | 0.3   | 0.2   | 0.2   |
| ARP, PLD, 50-92/85 |     | 0.7   | 0.3   | 0.6   | 0.5   | 0.5   | 0.5         | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   |
| CRP                |     | 0.0   | 0.0   | 0.0   | 0.0   | 0,0   | 0.0         | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Sugar              |     |       |       |       |       |       |             |       |       |       |       |       |
| Harvested          |     | 2.3   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4         | 2.4   | 2.4   | 2.4   | 2.5   | 2.5   |
|                    |     |       |       |       |       |       |             |       |       |       |       |       |
| 6 Other Crops*     |     |       |       |       |       |       |             |       |       |       |       |       |
| Planted**          |     | 7.7   | 8.3   | 8.2   | 8.2   | 8.3   | 8.3         | 8.3   | 8.3   | 8.3   | 8.4   | 8.4   |
| Other CRP Area     |     | 9.0   | 9.0   | 9.0   | 10.6  | 8.1   | 6.5         | 5.7   | 5.1   | 5.0   | 4.8   | 4.6   |
| Hay                | · . |       |       |       |       |       |             |       |       |       |       |       |
| Harvested          | v   | 59.7  | 58.7  | 59.8  | 60.3  | 60.9  | 61.4        | 61.7  | 61.8  | 61.6  | 61.4  | 61.3  |
| 15 Crops + Hav     |     | 377.3 | 372.2 | 375.4 | 378.4 | 375.5 | 374.0       | 373.1 | 372.9 | 373.4 | 372.7 | 372.9 |
| Planted            |     | 317.1 | 321.4 | 319.9 | 324.1 | 328.0 | 329.3       | 331.6 | 335.1 | 336.2 | 338.0 | 338.6 |
| Payment            |     | 121.4 | 127.8 | 124 7 | 126.6 | 129.3 | 130.9       | 131.1 | 133.2 | 132.5 | 133.6 | 133-4 |
| Non-Payment        |     | 195.6 | 193.6 | 195.2 | 197.5 | 198.7 | 198.4       | 200.6 | 202.0 | 203.8 | 204.4 | 205.2 |
| Idled              |     | 60.3  | 50.8  | 55.5  | 54.4  | 47.6  | 44 7        | 41.5  | 37.7  | 37.1  | 34 7  | 34.3  |
| ARP PID 0-92/85    |     | 23.8  | 14.3  | 19.1  | 16.4  | 17.0  | 20.1        | 20.1  | 18.6  | 18.3  | 16.4  | 16.6  |
| CRP                |     | 36.4  | 36.4  | 36.4  | 38.0  | 29.7  | 24.6        | 21.4  | 19.1  | 18.8  | 18.2  | 17.7  |

\* Sunflowers, peanuts, edible beans, tobacco, rye, and flaxseed. \*\* Harvested area for tobacco and rye.

| r .                    | 93/94 | 94/95 | 95/96 | 96/97         | 97/98           | 98/99              | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 |
|------------------------|-------|-------|-------|---------------|-----------------|--------------------|-------|-------|-------|-------|-------|
| Participation Rate     |       |       |       |               | (F              | Percent)           |       |       |       |       |       |
| Corn Belt              | 83    | 83    | 84    | 83            | 83 <sup>`</sup> | 84                 | 83    | . 83  | 83    | 82    | 82    |
| Northern Plains        | 90    | 90    | 89    | 89            | 89              | 90                 | 89    | 89    | 89    | 88    | 88    |
| Southeast              | 64    | 59    | 63    | 61            | 62              | 63                 | 62    | 62    | 62    | 61    | 61    |
| Other U.S.             | 66    | 67    | 67    | 65            | 66              | 68                 | 66    | 67    | 66    | 66    | 66    |
|                        |       |       |       |               | (Mill           | ion Acres)         |       |       |       |       |       |
| Base Area              | 81.81 | 81.53 | 81.53 | 81.53         | 82.10           | 82.22 <sup>′</sup> | 82.36 | 82.46 | 82.48 | 82.52 | 82.58 |
| Corn Belt              | 52.44 | 52.37 | 52.37 | 52.37         | 52.75           | 52.84              | 52.93 | 52.99 | 53.01 | 53.04 | 53.08 |
| Northern Plains        | 16.79 | 16.84 | 16.84 | 16.84         | 16.94           | 16.96              | 16.99 | 17.00 | 17.01 | 17.02 | 17.03 |
| Southeast              | 6.28  | 6.12  | 6.12  | 6.12          | 6,18            | 6.19               | 6.21  | 6.22  | 6.22  | 6.22  | 6.23  |
| Other U.S.             | 6.30  | 6.20  | 6.20  | 6.20          | 6.23            | 6.23               | 6.24  | 6.24  | 6.24  | 6.24  | 6.25  |
| ARP. PLD. 0-92/85 Area | 10.58 | 2.35  | 7.91  | 5.79          | 5.98            | 6.43               | 6.11  | 4.56  | 4.48  | 2.71  | 2.83  |
| Corn Belt              | 6.11  | 0.56  | 4.06  | 2.80          | 2.87            | 3.03               | 2.92  | 1.85  | 1.82  | 0.69  | 0.73  |
| Northern Plains        | 2.37  | 0.67  | 1.83  | 1.35          | 1.39            | 1.50               | 1.42  | 1.07  | 1.05  | 0.64  | 0.67  |
| Southeast              | 1.21  | 0.68  | 1.16  | 0.97          | 1.01            | 1.12               | 1.05  | 0.99  | 0.98  | 0.86  | 0.90  |
| Other U.S.             | 0.89  | 0.44  | 0.85  | 0.67          | 0.70            | 0.78               | 0.73  | 0.65  | 0.63  | 0.51  | 0.54  |
| CRP Idled              | 4 29  | 4 29  | 4 29  | 4 29          | 3 66            | 3 52               | 3 37  | 3 26  | 3 24  | 3 19  | 3 12  |
| Corn Belt              | 2.87  | 2.87  | 2.87  | 2.87          | 2 45            | 2.36               | 2.26  | 2 18  | 2 17  | 2 13  | 2.09  |
| Northern Plains        | 0.78  | 0.78  | 0.78  | 0.78          | 0.67            | 0.64               | 0.61  | 0.59  | 0.59  | 0.58  | 0.57  |
| Southeast              | 0.46  | 0.46  | 0.46  | 0.46          | 0.39            | 0.38               | 0.36  | 0.35  | 0.35  | 0.34  | 0.34  |
| Other U.S.             | 0.18  | 0.18  | 0.18  | 0.18          | 0.15            | 0.15               | 0.14  | 0.14  | 0.14  | 0.13  | 0.13  |
| Net Flexed Area        | -3.00 | -4 26 | -3.35 | -2.94         | -3 13           | -3.41              | -3.16 | -3.24 | -3.24 | -3 17 | -3.32 |
| Corn Belt              | -2.36 | -3.27 | -2.40 | -2.04         | -0.10           | -2.50              | -2.10 | -2./0 | -0.24 | -2.45 | -2.55 |
| Northern Plains        | -0.27 | -0.55 | -0.44 | -0.32         | -0.34           | -0.40              | -0.34 | -0.36 | -0.37 | -0.35 | -0.38 |
| Southeast              | -0.27 | -0.33 | _0.28 | -0.02         | -0.04           | -0.40              | -0.04 | -0.00 | -0.37 | -0.00 | -0.25 |
| Other U.S.             | -0.09 | -0.13 | -0.15 | -0.12         | -0.13           | -0.15              | -0.13 | -0.13 | -0.13 | -0.13 | -0.14 |
| Payment Planted Area   | 46.02 | 53 67 | 18 57 | <i>i</i> o 71 | 50.24           | 50 77              | 50 34 | 52 18 | 51 00 | 53.40 | 53 31 |
| Corn Belt              | 30.30 | 35 43 | 33.06 | 33.67         | 34.08           | 34 58              | 34 18 | 35.45 | 35.22 | 36 17 | 36 14 |
| Northern Plains        | 10.95 | 12 70 | 10.87 | 11 22         | 11 30           | 11 32              | 11 31 | 11 70 | 11 67 | 12.04 | 12.02 |
| Southeast              | 2.08  | 2.18  | 2.02  | 2.09          | 2.12            | 2.12               | 2.12  | 2 20  | 2 10  | 2.04  | 2.02  |
| Other U.S.             | 2.69  | 3.27  | 2.63  | 2.72          | 2.74            | 2.75               | 2.74  | 2.84  | 2.83  | 2.93  | 2.91  |
| Planted Area           | 73 24 | 79 16 | 75 81 | 79 08         | 79.06           | 78 18              | 79.37 | 80 90 | 80 94 | 82 88 | 82 30 |
| Corn Belt              | 45.85 | 50.10 | 48.99 | 50.60         | 50.58           | 50 14              | 50.64 | 51.68 | 51.68 | 52.00 | 52.63 |
| Northern Plains        | 15.30 | 16 62 | 15.00 | 15.84         | 15.88           | 15 73              | 15.89 | 16 24 | 16 25 | 16 68 | 16.61 |
| Southeast              | 4 94  | 4 90  | 4 63  | 5 42          | 5 47            | 5.33               | 5 74  | 5.81  | 5.85  | 5 98  | 5 92  |
| Other U.S.             | 7.15  | 7.54  | 6.95  | 7.22          | 7.14            | 6.99               | 7.10  | 7.17  | 7.17  | 7.31  | 7.23  |

U.S. Corn Land Use

|                 | 93/94  | 94/95  | 95/96 | 96/97 | 97/98  | 98/99      | 99/00 | 00/01 | 01/02 | 02/03  | 03/04  |
|-----------------|--|--------|-------|-------|--------|------------|-------|-------|-------|--------|--------|
|                 | <br>   |        |       |       | (Mil   | lion Acres |       |       |       |        |        |
| Harvested Area  | 62.92  | 72.92  | 68.72 | 71.70 | 71.71  | 70.94      | 72.02 | 73.43 | 73,49 | 75.26  | 74.83  |
| Corn Belt       | 40.53  | 47.69  | 46.05 | 47.57 | 47.55  | 47.13      | 47.61 | 48.59 | 48.59 | 49.75  | 49.50  |
| Northern Plains | 13.21  | 15.33  | 13.66 | 14.19 | 14.23  | 14.11      | 14.26 | 14.58 | 14.59 | 14.98  | 14.92  |
| Southeast       | 4.06   | 4.27   | 3.97  | 4.70  | 4.75   | 4.62       | 5.00  | 5.06  | 5.10  | 5.22   | 5.17   |
| Other U.S.      | 5.13   | 5.63   | 5.05  | 5.24  | 5.18   | 5.07       | 5.15  | 5.20  | 5.20  | 5.30   | 5.25   |
|                 |  |        |       |       | (Bush  | els per Ac | re)   |       |       |        |        |
| Yield           | 100.7  | 138,6  | 126.0 | 126.5 | 128.0  | 129.8      | 131.0 | 131.9 | 133.4 | 134.2  | 135.8  |
| Corn Belt       | 103.5  | 145.8  | 130.3 | 131.0 | 132.6  | 134.4      | 135.6 | 136.5 | 138.0 | 138.7  | 140.3  |
| Northern Plains | 97.6   | 131.9  | 124.2 | 124.7 | 126.4  | 128,5      | 129.8 | 130,7 | 132.4 | 133.0  | 134.8  |
| Southeast       | 77.6   | 107.1  | 96.1  | 96.8  | 98.3   | 100.0      | 101.1 | 102.5 | 103.9 | 105.2  | 106.7  |
| Other U.S.      | 104.8  | 119.5  | 115.1 | 116.4 | 117.7  | 119.0      | 120.3 | 121.5 | 122.7 | 123.9  | 125.1  |
|                 | and and a second se |        |       |       | (Milli | on Bushels | 5)    |       |       |        |        |
| Production      | 6,336  | 10,103 | 8,661 | 9,068 | 9,180  | 9,211      | 9,431 | 9,689 | 9,803 | 10,101 | 10,163 |
| Corn Belt       | 4,195  | 6,951  | 6,002 | 6,234 | 6,304  | 6,332      | 6,455 | 6,633 | 6,704 | 6,902  | 6,944  |
| Northern Plains | 1,289  | 2,022  | 1,697 | 1,770 | 1,799  | 1.813      | 1.851 | 1,906 | 1,931 | 1,993  | 2,012  |
| Southeast       | 314  | 457    | 382   | 455   | 467    | 462        | 505   | 519   | 530   | 549    | 551    |
| Other U.S.      | 538  | 673    | 581   | 610   | 610    | 604        | 620   | 632   | 639   | 657    | 656    |

U.S. Corn Land Use (continued)

|                          |       |                 |       |             |        |              | * · · ·      |       |       | · · · · · · |        |
|--------------------------|-------|-----------------|-------|-------------|--------|--------------|--------------|-------|-------|-------------|--------|
|                          | 93/94 | 94/95           | 95/96 | 96/97       | 97/98  | 98/99        | 99/00        | 00/01 | 01/02 | 02/03       | 03/04  |
| Participation Rate       |       | · ·             |       |             | (1     | Percent)     |              |       |       |             |        |
| Northern Plains          | 89    | 89              | 89    | 87          | 88     | 89           | 88           | 88    | 88    | 87          | 87     |
| Southern Plains          | 80    | 80              | 80    | 74          | 76     | 80           | 78           | 77    | 76    | 74          | 74     |
| Other U.S.               | 64    | 61 <sup>-</sup> | 64    | 57          | 60     | 64           | 62           | 61    | 60    | 58          | 58     |
|                          |       |                 |       |             | /M/ii  | lion Acros)  |              |       |       |             |        |
| Raso Aroa                | 13.47 | 13/6            | 13/6  | 13/6        | 14 03  | 1/1 31       | 11 15        | 14 55 | 14 56 | 14 58       | 14 60  |
| Northern Plains          | 6 5 8 | 6 58            | 6 58  | 6 58        | 682    | 6 05         | 7.01         | 7.05  | 7.06  | 7.06        | 7 07   |
| Southern Plains          | 4.63  | 4.63            | 163   | 4.63        | 1.85   | 1 06         | 5.01         | 5.05  | 5.05  | 5.06        | 5.06   |
| Other U.S.               | 2 27  | 2.26            | 2.26  | 2.26        | 2.36   | 4.90<br>2.41 | 2 44         | 2 45  | 2 45  | 2.46        | 2 46   |
|                          | 2.21  | 2.20            | 2.20  | 2.20        | 2.50   | 2.71         | 2.77         | 2.45  | 2,40  | 2.40        | 2.40   |
| ARP, PLD, 0-92/85 Area   | 2.23  | 1.61            | 1.80  | 1.60        | 1.75   | 1.93         | 1.87         | 1.87  | 1.85  | 1.77        | - 1.79 |
| Northern Plains          | 0.99  | 0.69            | 0.76  | 0.70        | 0.75   | 0.81         | 0.79         | 0.79  | 0.78  | 0.76        | 0.76   |
| Southern Plains          | 0.84  | 0.65            | 0.71  | 0.62        | 0.69   | 0.77         | 0.74         | 0.75  | 0.74  | 0.71        | 0.71   |
| Other U.S.               | 0.40  | 0.28            | 0.33  | 0.28        | 0.31   | 0.35         | 0.34         | 0.34  | 0.33  | 0.31        | 0.31   |
| CRP Idled                | 2.47  | 2.47            | 2.47  | 2.47        | 1.76   | 1.40         | 1.23         | 1.11  | 1.09  | 1.07        | 1.04   |
| Northern Plains          | 1.08  | 1.08            | 1.08  | 1.08        | 0.77   | 0.61         | 0.54         | 0.48  | 0.48  | 0.47        | 0.46   |
| Southern Plains          | 0.94  | 0.94            | 0.94  | 0.94        | 0.67   | 0.53         | 0.47         | 0.42  | 0.42  | 0.41        | 0.40   |
| Other U.S.               | 0.44  | 0.44            | 0.44  | 0.44        | 0.32   | 0.25         | 0.22         | 0.20  | 0.20  | 0.19        | 0.19   |
| Not Flored Area          | 0.95  | 0.22            | 0.99  | 0.24        | 0.29   | 0.95         | 0.20         | 0.20  | 0.24  | 0.20        | 0.20   |
| Northorn Dising          | -0.23 | -0.32           | -0.30 | -0.24       | 0.20   | -0.33        | -0.29        | -0.30 | -0.31 | -0.20       | -0.29  |
| Southern Diains          | -0.00 | -0.11           | -0.12 | 0.00        | -0.00  | -0.11        | -0.09        | -0.10 | -0.10 | -0.09       | -0.10  |
| Other U.S.               | -0.00 | -0.12           | -0.13 | -0.09       | -0.10  | -0.12        | -0.10        | -0.10 | -0.10 | -0.09       | -0.10  |
| Devene and Diamond Assoc | 0.05  | 0.00            | 0.74  | <b>C</b> 44 | 0.00   | 7.00         | 745          | 7 47  | 7 4 4 | 7.00        | 7.00   |
| Payment Planed Area      | 0.05  | 0.08            | 0.74  | 0,44        | 0.80   | 7.20         | 7.15         |       | 7.11  | 2.00        | 2.00   |
| Northern Plains          | 3.29  | 3.25            | 3.72  | 3,66        | 3.84   | 3.95         | 3,90         | 3.98  | 3,97  | 3.95        | 3.95   |
| Southern Plains          | 1.97  | 2.09            | 2.18  | 2.02        | 2.19   | 2.35         | 2.31         | 2.31  | 2.27  | 2.21        | 2.21   |
| Other U.S.               | 0.79  | 0.73            | 0.84  | 0.76        | 0.83   | 0.90         | 0.88         | 0.88  | 0.87  | 0.84        | 0.84   |
| Planted Area             | 9.88  | 9.77            | 9.87  | 10.55       | 10.94  | 10.91        | 11.26        | 11.32 | 11.33 | 11.39       | 11.40  |
| Northern Plains          | 4.96  | 5.03            | 5.33  | 5.55        | 5.77   | 5.81         | 5.93         | 5.95  | 5.93  | 5.99        | 6.00   |
| Southern Plains          | 3.44  | 3.33            | 2.96  | 3.39        | 3.52   | 3.44         | 3.63         | 3.67  | 3.70  | 3.70        | 3.72   |
| Other U.S.               | 1.48  | 1.42            | 1.57  | 1.61        | 1.65   | 1.66         | 1.70         | 1.70  | 1.70  | 1.70        | 1.69   |
| Harvested Area           | 8.92  | 8.97            | 8.95  | 9.57        | 9.93   | 9,90         | 10.22        | 10.27 | 10.28 | 10.33       | 10.35  |
| Northern Plains          | 4.43  | 4.61            | 4.78  | 4.98        | 5.18   | 5.22         | 5.32         | 5.34  | 5.33  | 5.38        | 5.39   |
| Southern Plains          | 3.21  | 3.06            | 2.78  | 3.17        | 3.28   | 3.20         | 3.38         | 3.41  | 3.45  | 3.44        | 3.46   |
| Other U.S.               | 1.28  | 1.30            | 1.40  | 1.43        | 1.47   | 1.48         | 1.51         | 1.52  | 1.51  | 1.51        | 1.50   |
|                          |       |                 |       |             | (Bush  | els per Ac   | re)          |       |       |             |        |
| Yield                    | 59.9  | 73.0            | 66.7  | 66.6        | 66.9   | 67.2         | 67.4         | 67.7  | 67.9  | 68.2        | 68.4   |
| Northern Plains          | 60.4  | 81.0            | 70.4  | 70.7        | 71.0   | 71.4         | 71.8         | 72.2  | 72.6  | 73.0        | 73.4   |
| Southern Plains          | 55.7  | 56.9            | 56.8  | 57.0        | 57.1   | 57.2         | 57.3         | 57.4  | 57.5  | 57.6        | 57.7   |
| Other U.S.               | 68.5  | 82.7            | 73.5  | 73.8        | 74.0   | 74.2         | 74.5         | 74.7  | 74.9  | 75.1        | 75.3   |
|                          |       |                 |       |             | (Milli | on Bushek    | 5)           |       |       |             |        |
| Production               | 534   | 655             | 597   | 638         | 664    | 666          | <i>.</i> 689 | 695   | 698   | 705         | 708    |
| Northern Plains          | 268   | 373             | 336   | 352         | 368    | 373          | 382          | 386   | 387   | 392         | 395    |
| Southern Plains          | 179   | 174             | 158   | 181         | 187    | 183          | 194          | 196   | 198   | 199         | 200    |
| Other U.S.               | 88    | 107             | 103   | 105         | 109    | 110          | 113          | 113   | 113   | 114         | 113    |
|                          |       |                 |       |             |        |              |              |       |       |             |        |

U.S. Sorghum Land Use

|                        | 93/94       | 94/95 | 95/96 | 96/97       | 97/98           | 98/99        | 99/00        | 00/01 | 01/02 | 02/03        | 03/04      |
|------------------------|-------------|-------|-------|-------------|-----------------|--------------|--------------|-------|-------|--------------|------------|
| Participation Rate     |             |       |       |             | (F              | Percent)     |              |       |       |              | · <u> </u> |
| Northern Plains        | 87          | 88    | 88    | 86          | 87 <sup>`</sup> | 88           | 88           | 88    | 88    | 87           | 87         |
| Far West               | 77          | 80    | 76    | 72          | 72              | 76           | 76           | 76    | 76    | 75           | 75         |
| Other U.S.             | 68          | 70    | 67    | 64          | 64              | 67           | 67           | 67    | 67    | 66           | 65         |
|                        |             |       |       |             | (Mill           | ion Acres)   |              |       |       |              |            |
| Base Area              | 10.80       | 10.68 | 10.68 | 10.68       | 11.31           | 11.76        | 12.04        | 12.26 | 12.28 | 12.30        | 12.32      |
| Northern Plains        | 6.90        | 6.87  | 6.87  | 6.87        | 7.27            | 7.55         | 7.72         | 7.86  | 7.87  | 7.88         | 7.89       |
| Far West               | 2.45        | 2.39  | 2.39  | 2.39        | 2.55            | 2.67         | 2.74         | 2.80  | 2.80  | 2.81         | 2.82       |
| Other U.S.             | 1.44        | 1.42  | 1.42  | 1.42        | 1.49            | 1.55         | 1.58         | 1.61  | 1.61  | 1.61         | 1.61       |
| ARP, PLD, 0-92/85 Area | 2.50        | 2.66  | 2.47  | 1.96        | 2.18            | 2.82         | 3.01         | 3.16  | 3.21  | 3.16         | 3.21       |
| Northern Plains        | 1.71        | 1.85  | 1.66  | 1.36        | 1.51            | 1.90         | 2.02         | 2.12  | 2.16  | 2.13         | 2.17       |
| Far West               | 0.60        | 0.61  | 0.62  | 0.46        | 0.51            | 0.70         | 0.75         | 0.78  | 0.79  | 0.77         | 0.78       |
| Other U.S.             | 0.19        | 0.21  | 0.19  | 0.14        | 0.16            | 0.22         | 0.24         | 0.26  | 0.26  | 0.26         | 0.26       |
| CRP Idled              | 2.83        | 2.83  | 2.83  | 2.83        | 2.04            | 1.48         | 1.13         | 0.85  | 0.83  | 0.80         | 0.78       |
| Northern Plains        | 1.76        | 1.76  | 1.76  | 1.76        | 1.27            | 0.92         | 0.70         | 0.53  | 0.52  | 0.50         | 0.48       |
| Far West               | 0.74        | 0.74  | 0.74  | 0.74        | 0.53            | 0.38         | 0.29         | 0.22  | 0.22  | 0.21         | 0.20       |
| Other U.S.             | 0.33        | 0.33  | 0.33  | 0.33        | 0.24            | 0.17         | 0.13         | 0.10  | 0.10  | 0.09         | 0.09       |
| Net Flexed Area        | -0.52       | -0.58 | -0.57 | -0.49       | -0.52           | -0.59        | -0.61        | -0.65 | -0.68 | -0.68        | -0.69      |
| Northern Plains        | -0.37       | -0.43 | -0.43 | -0.38       | -0.40           | -0.45        | -0.47        | -0.50 | -0.52 | -0.53        | -0.54      |
| Far West               | -0.06       | -0.05 | -0.05 | -0.04       | -0.04           | -0.05        | -0.05        | -0.05 | -0.06 | -0.06        | -0.06      |
| Other U.S.             | -0.10       | -0.09 | -0.09 | -0.07       | -0.08           | -0.09        | -0.09        | -0.09 | -0.10 | -0.09        | -0.10      |
| Payment Planted Area   | 4.65        | 4.43  | 4.67  | 4.95        | 5.20            | 5.06         | 5.07         | 5.07  | 5.01  | 5.02         | 4.97       |
| Northern Plains        | 3.20        | 3.01  | 3.27  | 3.48        | 3.64            | 3.52         | 3.54         | 3.54  | 3.50  | 3.51         | 3.47       |
| Far West               | 0.88        | 0.88  | 0.83  | 0.90        | 0.96            | 0.92         | 0.93         | 0.93  | 0.91  | 0.92         | 0.91       |
| Other U.S.             | 0.57        | 0.54  | 0.57  | 0.57        | 0.60            | 0.61         | 0.61         | 0.61  | 0.60  | 0.59         | 0.58       |
| Planted Area           | 7.83        | 7.17  | 7.42  | 8.19        | 8.72            | 8.46         | 8.53         | 8.51  | 8.36  | 8.44         | 8.37       |
| Northern Plains        | 4.87        | 4.38  | 4.63  | 5.04        | 5.33            | 5.18         | 5.22         | 5.22  | 5.14  | 5.18         | 5.13       |
| Far West               | 1.69        | 1.64  | 1.61  | 1.88        | 2.05            | 1.98         | 2.00         | 1.99  | 1.94  | 1.98         | 1.97       |
| Other U.S.             | 1.27        | 1.16  | 1.19  | 1.28        | 1.34            | 1.30         | 1.31         | 1.30  | 1.27  | 1.28         | 1.27       |
| Harvested Area         | 6.79        | 6.68  | 6.81  | 7.54        | 8.02            | 7.79         | 7.85         | 7.83  | 7.69  | 7.77         | 7.70       |
| Northern Plains        | 4.11        | 4.13  | 4.26  | 4.65        | 4.92            | 4.78         | 4.82         | 4.82  | 4.74  | 4.78         | 4.74       |
| Far West               | 1.59        | 1.52  | 1.49  | 1.75        | 1.92            | 1.85         | 1.87         | 1.87  | 1.82  | 1.86         | 1.84       |
| Other U.S.             | 1.10        | 1.03  | 1.06  | 1.13        | 1.18            | 1.16         | 1.16         | 1.15  | 1.13  | 1.14         | 1.12       |
| Viald                  | <b>F0 C</b> | 50.4  | 57.0  | <b>-7 -</b> | (Bush           | els per Acr  | e)           | 50.0  | 50.4  | 50.4         | 50.7       |
| Northern Dising        | 58.6        | 50.1  | 57.5  | 57.7        | 57.8            | 58.2         | 58.5         | 58.8  | 59.1  | 59.4         | 59.7       |
| Norment Plains         | 52.5        | 51.9  | 51.7  | 51.8        | 51.9            | 52.Z         | 52.4         | 52.6  | 52.8  | 53.0         | 53.3       |
| Other US               | 10.0        | 00.Z  | 73.0  | 12.Z        | / 1.0<br>E0.7   | 12.1<br>60.0 | 73.0<br>60.5 | 13.5  | 14.Z  | 74.0<br>61 E | 75.0       |
| Other 0.5.             | 9.90        | 55.4  | 59.6  | 59.6        | 59.7            | 60.2         | 60.5         | 60.8  | 61.2  | 61.5         | 01.8       |
| Droduction             | 200         | 075   |       | 405         | (Millio         | on Bushels   | )            | 404   | 455   | 404          | 400        |
| Northam Diains         | 398         | 3/5   | 392   | 435         | 464             | 453          | 459          | 401   | 455   | 401          | 460        |
|                        | 216         | 214   | 221   | <b>∠</b> 41 | 255             | 249          | 252          | 253   | 251   | 253          | 252        |
|                        | 120         | 104   | 109   | 127         | 138             | 135          | 137          | 137   | 135   | 138          | 138        |
| Utner U.S.             | 62          | 57    | 63    | 68          | /1              | 70           | 70           | 70    | 69    | 70           | 69         |

U.S. Barley Land Use

| •                      | 93/94        | 94/95    | 95/96    | 96/97 | 97/98          | 98/99       | 99/00     | 00/01    | 01/02     | 02/03    | 03/04    |
|------------------------|--------------|----------|----------|-------|----------------|-------------|-----------|----------|-----------|----------|----------|
| Participation Rate     |              | . ·      |          |       |                | Percent)    |           |          |           |          |          |
| Corn Belt              | 33           | 29       | 35       | 31    | 26             | 29          | 29        | 28       | 27        | 25       | 25       |
| Northern Plains        | 61           | 55       | 62       | 60    | 57             | 59          | 59        | 59       | 58        | 58       | 58       |
| Other U.S.             | 34           | 25       | 31       | 28    | 26             | 28          | 28        | 28       | 27        | 27       | 27       |
|                        |              |          |          |       |                |             |           |          |           |          |          |
|                        |              |          |          |       | (Mill          | ion Acres)  |           |          |           |          |          |
| Base Area              | 7.07         | 6.83     | 6.83     | 6.83  | 7.2 <b>`</b> 4 | 7.52        | 7.71      | 7.86     | 7.88      | 7.91     | 7.95     |
| Corn Belt              | 2.64         | 2.54     | 2.54     | 2.54  | 2.72           | 2.79        | 2.83      | 2.87     | 2.88      | 2.90     | 2,92     |
| Northern Plains        | 3.14         | 3.06     | 3.06     | 3.06  | 3.24           | 3.42        | 3.54      | 3.65     | 3.65      | 3.66     | 3,67     |
| Other U.S.             | 1.28         | 1.22     | 1.22     | 1.22  | 1.28           | 1.32        | 1.34      | 1.35     | 1.35      | 1.35     | 1.36     |
| ARP, PLD, 0-92/85 Area | 0.85         | 0.57     | 0.77     | 0.71  | 0.69           | 0.78        | 0.82      | 0.84     | 0.83      | 0.82     | 0.83     |
| Corn Belt              | 0.06         | 0.02     | 0.06     | 0.05  | 0.05           | 0.06        | 0.06      | 0.06     | 0.05      | 0.05     | 0.05     |
| Northern Plains        | 0.61         | 0.48     | 0.58     | 0.54  | 0.54           | 0.61        | 0.64      | 0.66     | 0.65      | 0.65     | 0.65     |
| Other U.S.             | 0.17         | 0.07     | 0.12     | 0.11  | 0.10           | 0.12        | 0.12      | 0.12     | 0.12      | 0.12     | 0.12     |
| CRP Idled              | 1.40         | 1.40     | 1.40     | 1.40  | 0.88           | 0.53        | 0.30      | 0.11     | 0.09      | 0.04     | 0.00     |
| Corn Belt              | 0.47         | 0.47     | 0.47     | 0.47  | 0.25           | 0.17        | 0.11      | 0.07     | 0.06      | 0.03     | 0.00     |
| Northern Plains        | 0.76         | 0.76     | 0.76     | 0.76  | 0.53           | 0.31        | 0.16      | 0.02     | 0.02      | 0.01     | 0.00     |
| Other U.S.             | 0.17         | 0.17     | 0.17     | 0.17  | 0.10           | 0.05        | 0.03      | 0.02     | 0.01      | 0.00     | 0,00     |
| Net Flexed Area        | -0.27        | -0.26    | -0.27    | -0.24 | -0.23          | -0.25       | -0.26     | -0.27    | -0.27     | -0.26    | -0.27    |
| Corn Belt              | -0.10        | -0.09    | -0.09    | -0.08 | -0.07          | -0.08       | -0.08     | -0.08    | -0.07     | -0.07    | -0.07    |
| Northern Plains        | -0.15        | -0.15    | -0.17    | -0.15 | -0.15          | -0.16       | -0.17     | -0.17    | -0.18     | -0.17    | -0.18    |
| Other U.S.             | -0.02        | -0.02    | -0.02    | -0.01 | -0.01          | -0.01       | -0.02     | -0.02    | -0.02     | -0.02    | -0.02    |
| Payment Planted Area   | : 1.41       | 1.12     | 1.42     | 1.30  | 1.28           | 1.43        | 1.48      | 1.49     | 1.44      | 1.40     | 1.39     |
| Corn Belt              | 0.43         | 0.32     | 0.50     | 0.41  | 0.36           | 0.43        | 0.44      | 0.42     | 0.40      | 0.36     | 0.36     |
| Northern Plains        | 0.73         | 0.61     | 0.77     | 0.75  | 0.79           | 0.86        | 0.89      | 0.92     | 0.91      | 0.90     | 0.89     |
| Other U.S.             | 0.25         | 0.19     | .0.14    | 0.13  | 0.13           | 0.14        | 0.15      | - 0.14   | 0.14      | 0.14     | 0.14     |
| Planted Area           | 7.94         | 6.64     | 7.17     | 6.89  | 7.18           | 7.20        | 7.17      | 7.03     | 7.04      | 6.88     | 6.89     |
| Corn Belt              | 3.66         | 2.41     | 3.11     | 2.84  | 2.88           | 2.84        | 2.75      | 2.53     | 2.49      | 2.26     | 2.23     |
| Northern Plains        | 2.17         | 2.28     | 2.05     | 2.04  | 2.16           | 2.19        | 2.23      | 2.28     | 2.31      | 2.35     | 2.38     |
| Other U.S.             | 2.12         | 1.96     | 2.01     | 2.01  | 2.14           | .2.17       | 2.19      | 2.22     | 2.24      | 2.27     | 2.29     |
| Harvested Area         | 3.80         | 4.02     | 3.59     | 3.44  | 3.64           | 3.65        | 3.63      | 3.68     | 3.69      | 3.71     | 3.72     |
| Corn Belt              | 1.65         | 1.74     | 1.60     | 1.47  | . 1.47         | 1.41        | 1.33      | 1.28     | 1.23      | 1.18     | 1.14     |
| Northern Plains        | 1.36         | 1.50     | 1.24     | 1.22  | 1.34           | 1 40        | 1,46      | 1.53     | 1.57      | 1.63     | 1.67     |
| Uther U.S.             | 0.79         | 0.78     | 0.75     | 0.75  | 0.82           | 0.84        | 0.85      | 0.87     | 0.88      | 0.90     | 0.91     |
| Viala                  | 54.4         | 57.0     | 50.0     |       | (Bush          | els per Acr | e)        | 50.0     | 50.0      | 50.0     | 50.0     |
| Cam Balt               | 04.4<br>40.0 | 57.2     | 0.95     | 59.1  | 59.Z           | 59.1        | 59.0      | 59.0     | 59.Z      | 59.Z     | 59.3     |
| Corri Bell             | 48.9         | 56.9     | 63.0     | 63.Z  | 63.4           | 63.6        | 63.8      | 64.0     | 64.Z      | 64,4     | 64.5     |
| Northern Plains        | 58.7         | 56.1     | 53.4     | 53.5  | 53.7           | 53.5        | 53.4      | 53.4     | - 53.8    | 54.0     | 54.1     |
| Uther U.S.             | 58.4         | 60.0     | 59.8     | 60.2  | 60.5           | 60.8        | 61.2      | 61.5     | 61.8      | 62.1     | 62.4     |
| Dreduction             | 007          | 220      | 24.0     | 000   | (Millio        | on Bushels  | s)<br>045 | 047      | 040       | 222      | 004      |
| Com Bolt               | 207          | 230      | 212      | 203   | 215            | 210         | 215       | 217      | 210       | 220      | 221      |
| Curil Bell             | 81           | 99       | 101      | 93    | 93             | 90          | 85        | 82       | /9        | /0       | 14       |
| Northern Plains        | 80           | 84<br>17 | 00<br>AE | 00    | 12             | /5<br>E4    | /ð<br>50  | 82<br>50 | 60<br>E / | 88<br>56 | 90<br>E7 |
|                        | 40           | 47       | 40       | 45    | 50             | 51          | 52        | 53       | 54        | 00       | 57       |

U.S. Oats Land Use

|                 |     | 93/94 | 94/95 | 95/96 | 96/97 | 97/98   | 98/99       | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 |
|-----------------|-----|-------|-------|-------|-------|---------|-------------|-------|-------|-------|-------|-------|
|                 |     |       | ŕ     |       |       | (Mil    | lion Acres) |       |       |       |       |       |
| CRP Idled       |     | 4 16  | 4.16  | 4.16  | 4 16  | 3 68    | 3.47        | 3 32  | 3 22  | 3 20  | 3 15  | 3 10  |
| Corn Belt       |     | 2.90  | 2.90  | 2.90  | 2.90  | 2.57    | 2 43        | 2.32  | 2 25  | 2 23  | 2 20  | 2.16  |
| Northern Plains |     | 0.39  | 0.39  | 0.39  | 0.39  | 0.35    | 0.33        | 0.31  | 0.30  | 0.30  | 0.30  | 0.29  |
| Delta States    |     | 0.65  | 0.00  | 0.00  | 0.00  | 0.00    | 0.00        | 0.36  | 0.35  | 0.34  | 0.34  | 0.33  |
| Other U.S.      |     | 0.42  | 0.42  | 0.42  | 0.42  | 0.37    | 0.35        | 0.33  | 0.32  | 0.32  | 0.32  | 0.31  |
| Net Flexed Area |     | 4.72  | 5.91  | 4.68  | 4.38  | 4,77    | 5.17        | 4.98  | 5.05  | 5.02  | 4.98  | 5.17  |
| Corn Belt       |     | 2.82  | 3.72  | 2.83  | 2.62  | 2.82    | 3.04        | 2.92  | 2.97  | 2.95  | 2.93  | 3.04  |
| Northern Plains |     | 0.99  | 1.32  | 1.05  | 0.98  | 1.09    | 1.20        | 1.15  | 1.16  | 1.14  | 1.13  | 1.17  |
| Delta States    |     | 0.51  | 0.47  | 0.47  | 0.47  | 0.52    | 0.55        | 0.55  | 0.55  | 0.55  | 0.56  | 0.57  |
| Other U.S.      |     | 0.41  | 0.40  | 0.33  | 0.30  | 0.34    | 0.39        | 0.36  | 0.37  | 0.37  | 0.36  | 0.39  |
| Planted Area    |     | 60.14 | 61.94 | 59.52 | 59.27 | 60.81   | 62.11       | 62.00 | 62.45 | 62.68 | 62.70 | 63.48 |
| Corn Belt       |     | 38.66 | 39.81 | 38.01 | 37.67 | 38.60   | 39.30       | 38,93 | 39.13 | 39.17 | 39.14 | 39.60 |
| Northern Plains |     | 7.05  | 8.14  | 8.25  | 8.42  | 8.71    | 9.00        | 9.09  | 9.16  | 9.19  | 9.19  | 9.27  |
| Delta States    |     | 6.95  | 6.55  | 6.35  | 6.46  | 6.69    | 6.89        | 6.99  | 7.07  | 7.13  | 7.15  | 7.24  |
| Other U.S.      |     | 7.48  | 7.44  | 6.90  | 6.73  | 6.81    | 6.93        | 6.99  | 7.08  | 7.19  | 7.21  | 7.36  |
| Harvested Area  |     | 57.35 | 61.13 | 58.36 | 58.12 | 59.64   | 60.92       | 60.81 | 61.26 | 61.48 | 61.51 | 62.27 |
| Corn Belt       |     | 36.89 | 39.50 | 37.57 | 37.23 | 38.15   | 38.83       | 38.47 | 38.67 | 38.71 | 38.68 | 39.14 |
| Northern Plains |     | 6.69  | 7.99  | 8.05  | 8.22  | 8.50    | 8.78        | 8.87  | 8.94  | 8.97  | 8.98  | 9.05  |
| Delta States    |     | 6.80  | 6.44  | 6.18  | 6.29  | 6.52    | 6.72        | 6.82  | 6.90  | 6.96  | 6.98  | 7.07  |
| Other U.S.      |     | 6.97  | 7.20  | 6.56  | 6.39  | 6.47    | 6.59        | 6.65  | 6.74  | 6.84  | 6.87  | 7.01  |
|                 |     |       |       |       |       | (Bush   | els per Acr | e)    |       |       |       |       |
| Yield           |     | 32.6  | 41.9  | 35.7  | 36.3  | 36.5    | 36.8        | 37.4  | 37.8  | 38.3  | 38.8  | 39.1  |
| Corn Belt       |     | 36.1  | 45.0  | 38.8  | 39.5  | 39.8    | 40.1        | 40.8  | 41.4  | 41.9  | 42.5  | 42.9  |
| Northern Plains |     | 28,5  | 40.8  | 32.7  | 33.1  | 33.4    | 33.8        | 34.2  | 34.6  | 35.0  | 35.5  | 35.8  |
| Delta States    |     | 24.5  | 32.2  | 28.2  | 28.4  | 28.7    | 28.9        | 29.2  | 29.5  | 29.7  | 30.0  | 30.3  |
| Other U.S.      |     | 26.0  | 34.1  | 29.0  | 29.3  | 29.6    | 29.8        | 30.1  | 30.3  | 30.6  | 30.8  | 31.1  |
|                 |     |       |       |       |       | (Millio | on Bushels  | )     |       |       |       |       |
| Production      |     | 1,871 | 2,558 | 2,084 | 2,109 | 2,180   | 2,244       | 2,273 | 2,316 | 2,354 | 2,385 | 2,437 |
| Corn Belt       |     | 1,333 | 1,779 | 1,456 | 1,471 | 1,517   | 1,557       | 1,571 | 1,599 | 1,623 | 1,645 | 1,680 |
| Northern Plains |     | 191   | 326   | 264   | 272   | 284     | 296         | 303   | 309   | 314   | 318   | 325   |
| Delta States    |     | 166   | 208   | 174   | 179   | 187     | 194         | 199   | 203   | 207   | 210   | 214   |
| Other U.S.      | ÷ * | 181   | 245   | 190   | 187   | 191     | 197         | 200   | 204   | 209   | 212   | 218   |

## U.S. Soybean Land Use

|                        | 93/94        | 94/95        | 95/96         | 96/97        | 97/98         | 98/99        | 99/00          | 00/01          | 01/02        | 02/03        | 03/04        |
|------------------------|--------------|--------------|---------------|--------------|---------------|--------------|----------------|----------------|--------------|--------------|--------------|
| Participation Rate     |              |              |               |              | ()            | Percent)     |                |                |              |              |              |
| Corn Belt              | 71           | 70           | 69            | 69           | 71            | 71           | 71             | 70             | 69           | 69           | 68.          |
| Northern Plains        | 94           | 94           | 93            | 93           | 94            | 94           | 94             | 93             | 93           | 93           | 92           |
| Southern Plains        | 89           | 89           | 87            | 88           | 89            | 90           | 90             | 89             | 88           | - 88         | 87           |
| Far West               | 88           | 88           | 85            | 86           | 87            | 88           | 87             | 87             | 86           | 85           | - 85         |
| Other U.S.             | 65           | 63           | 61            | 62           | 63            | 64           | 64             | 63             | 62           | 61           | 61           |
|                        |              |              |               |              | /5.4:11       |              |                |                |              |              |              |
|                        | 70.00        | 70 40        | 70.40         | 70.40        | (MIII)        | lion Acres)  | 00.00          | 00.77          | 00.00        | 00.05        | 04.00        |
| Com Dolt               | 10.30        | 10.1Z        | 10.12         | 10.12        | 10.10         | 01.00        | 0Z.99<br>40.40 | 00.//<br>40.40 | 10.40        | 10.50        | 40.50        |
| Northorn Plains        | 9.91         | 9.00         | 9.00          | 9.00         | 10.10         | 10.27.       | 10.40          | 10.40          | 10.49        | 10.50        | 10.52        |
| Southern Diains        | 41.70        | 41.01        | 41.01         | 41.01        | 42.90         | 40.00        | 44.22          | 44.01          | 44.00        | 44.70        | 44.70        |
| Southern Flains        | 6.60         | 13.40        | 13.40         | 13.40        | 13.94<br>6.96 | 7.02         | 7 1 4          | 14.07          | 14.00        | 7.24         | 14.10        |
| Other U.S.             | 0.09         | 6.24         | 6.24          | 6.24         | 0.00          | 1.02         | 6.72           | 6.70           | 6.90         | 6.01         | 6.00         |
| Other 0.3.             | 0.40         | 0.34         | 0.34          | 0.34         | 0.01          | 0.04         | 0.75           | 0.79           | 0.00         | 0.01         | 0.02         |
| ARP, PLD, 0-92/85 Area | 5.67         | 5.18         | 5.18          | 5.51         | 5.77          | 5.89         | 6.05           | 5.97           | 5.72         | 5.74         | 5.68         |
| Corn Belt              | 0.43         | 0.28         | 0.27          | 0.29         | 0.33          | 0.38         | 0.39           | 0.38           | 0.36         | 0.36         | 0.35         |
| Northern Plains        | 1.90         | 1.89         | 1.88          | 1.99         | 2.02          | 2.01         | 2.06           | 2.04           | 1.98         | 1.99         | 1.98         |
| Southern Plains        | 1.81         | 1.74         | 1.70          | 1.79         | 1.84          | 1.84         | 1.89           | 1.88           | 1.82         | 1.82         | 1.81         |
| Far West               | 0.59         | 0.51         | 0.49          | 0.54         | 0.65          | 0.72         | 0.74           | 0.71           | 0.66         | 0.66         | 0.64         |
| Other U.S.             | 0.93         | 0.76         | 0.83          | 0.89         | 0.93          | 0.95         | 0.97           | 0.96           | 0.92         | 0.92         | 0.90         |
| CRP Idled              | 10.83        | 10 83        | 10.83         | 10.83        | 8 39          | 6 67         | 5 42           | 4 56           | 4 50         | 4 36         | 4 23         |
| Corn Belt              | 1 20         | 1 20         | 1 20          | 1 20         | 0.93          | 0.74         | 0.60           | 0.51           | 0.50         | 0.48         | 0.47         |
| Northern Plains        | 5.37         | 5.37         | 5 37          | 5 37         | 4 16          | 3.31         | 2.69           | 2.26           | 2.23         | 2.16         | 2.10         |
| Southern Plains        | 2 27         | 2 27         | 2 27          | 2 27         | 1 76          | 1 40         | 1 14           | 0.96           | 0.94         | 0.91         | 0.89         |
| Far West               | 1.11         | 1.11         | 1.11          | 1.11         | 0.86          | 0.68         | 0.55           | 0.47           | 0.46         | 0.45         | 0.43         |
| Other U.S.             | 0.87         | 0.87         | 0.87          | 0.87         | 0.68          | 0.54         | 0.44           | 0.37           | 0.36         | 0.35         | 0.34         |
| Net Flexed Area        | -2.22        | -2.36        | -1 76         | -2.04        | -2.27         | -2 33        | -2 39          | -2 31          | -2.18        | -2.25        | -2.23        |
| Corn Belt              | -0.48        | -0.52        | -0.36         | -0.42        | -0.46         | -0.48        | -0.52          | -0.51          | -0.50        | -0.52        | -0.52        |
| Northern Plains        | -1 00        | -1 12        | -0.76         | -0.93        | -1.03         | -1.05        | -1.08          | -1 04          | -0.98        | -1.00        | -0.99        |
| Southern Plains        | -0.22        | -0.21        | -0.16         | -0.17        | -0.18         | -0.18        | -0.18          | -0.17          | -0.15        | -0.16        | -0.15        |
| Far West               | -0.14        | -0.15        | -0.14         | -0.16        | -0.18         | -0.19        | -0.19          | -0.18          | -0.16        | -0.17        | -0.16        |
| Other U.S.             | -0.38        | -0.35        | -0.34         | -0.36        | -0.41         | -0.43        | -0.43          | -0.41          | -0.39        | -0.40        | -0.40        |
| Payment Planted Area   | 50 55        | 49.86        | 19 12         | 50 10        | 52 29         | 53 70        | 54 25          | 54 48          | 54 20        | 54 08        | 54.00        |
| Corn Belt              | 5 10         | 4 85         | 4 90          | 5 13         | 5 42          | 5 54         | 5 58           | 5 57           | 5.51         | 5 48         | 5 46         |
| Northern Plains        | 30.77        | 30.45        | 30.18         | 30.45        | 31.60         | 32.36        | 32 70          | 32.87          | 32 74        | 32 70        | 32.67        |
| Southern Plains        | 8.14         | 8.09         | 8.10          | 8.10         | 8.60          | 8.93         | 9.03           | 9.08           | 9.02         | 8.99         | 8.96         |
| Far West               | 4.21         | 4.24         | 4.10          | 4.19         | 4:32          | 4.42         | 4.47           | 4.50           | 4.49         | 4.48         | 4.47         |
| Other U.S.             | 2.33         | 2.24         | 2.14          | 2.23         | 2.35          | 2.45         | 2.46           | 2.46           | 2.45         | 2.43         | 2.43         |
| Plantod Aroa           | 70 47        | 70.40        | 71 10         | 71.06        | 70 4 4        | 72 24        | 74.07          | 75 69          | 76.05        | 76 74        | 77 97        |
| Corp Polt              | 12.17        | 10.42        | 0.40          | 0.11         | 12.14         | 10.01        | 14.01          | 10.00          | (0.95<br>070 | 10.14        | 11.31        |
| Jorffi Bell            | 0.61         | 1.12         | 0.12<br>20.20 | 0.40         | 0.30<br>20.00 | 0.3Z         | 0.33           | 0.53           | 0.72         | 0.00         | 0.00         |
| Northern Plains        | 38.66        | 30.1Z        | 30.39         | 30.23        | 39.09         | 40.02        | 40.41          | 41.10          | 41.65        | 41.57        | 41,80        |
| Southern Mains         | 13.71        | 13.57        | 13.64         | 13.49        | 13./7         | 13.78        | 13.90          | 14.14          | 14.33        | 14.3Z        | 14.38        |
| Other U.S.             | 6.22<br>4,96 | 6.09<br>4.93 | 5.95<br>5.01  | 5.93<br>5.00 | 5.83<br>5.14  | ວ.88<br>5.31 | 6.00<br>5.43   | 0.23<br>5.62   | 0.40<br>5.80 | 0.40<br>5.73 | v.5∠<br>5.93 |

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U.S. Wheat Land Use

|                 |   | 93/94 | 94/95 | 95/96 | 96/97 | 97/98  | 98/99       | 99/00             | 00/01 | 01/02 | 02/03 | 03/04 |
|-----------------|---|-------|-------|-------|-------|--------|-------------|-------------------|-------|-------|-------|-------|
| <u></u>         |   |       |       |       |       | (Mil   | lion Acres) |                   |       |       |       |       |
| Harvested Area  |   | 62.71 | 61.77 | 62.01 | 61.88 | 62.63  | 63.52       | 64,14             | 65.55 | 66.69 | 66.49 | 67.03 |
| Corn Belt       |   | 7.62  | 7.15  | 7.49  | 7.74  | 7.70   | 7.64        | 7.65              | 7.83  | 8.01  | 7.95  | 7.97  |
| Northern Plains |   | 35.60 | 36.26 | 35.42 | 35,29 | 36.03  | 36.83       | 37.17             | 37.81 | 38.23 | 38.17 | 38.41 |
| Southern Plains |   | 9.37  | 8,43  | 9.21  | 8,99  | 9.01   | 8.95        | 9.02              | 9.20  | 9.38  | 9.35  | 9.39  |
| Far West        | - | 5.92  | 5,76  | 5.64  | 5.62  | 5.53   | 5.58        | 5,68              | 5.90  | 6.11  | 6.11  | 6.16  |
| Other U.S.      |   | 4.21  | 4.18  | 4.25  | 4.23  | 4.36   | 4.51        | 4.63              | 4.81  | 4.97  | 4.91  | 5.09  |
|                 |   |       |       |       |       | (Bush  | els per Aci | re)               |       |       |       |       |
| Yield           |   | 38.2  | 37.6  | 38.8  | 39.1  | 39.2   | 39.3        | <sup>′</sup> 39.6 | 39.8  | 40.1  | 40.5  | 40.8  |
| Corn Belt       |   | 40.3  | 44.7  | 48.1  | 48.3  | 48.8   | 49.3        | 49.7              | 50.0  | 50.3  | 50.7  | 51.1  |
| Northern Plains |   | 34.3  | 33.4  | 33.5  | 33.7  | 33.8   | 33.8        | 34.0              | 34.0  | 34.3  | 34.6  | 34.9  |
| Southern Plains |   | 30.0  | 26.6  | 31.0  | 31.2  | 31.3   | 31.5        | 31.6              | 31.7  | 31.8  | 32.0  | 32.2  |
| Far West        |   | 69.4  | 61.9  | 68.8  | 69.4  | 70.3   | .71.0       | 71.6              | 71.9  | 72.2  | 72.9  | 73.5  |
| Other U.S.      |   | 42.1  | 50.1  | 43.4  | 43.7  | 44.0   | 44.3        | 44.6              | 44.8  | 45.1  | 45.4  | 45.6  |
| • ·             |   |       |       |       |       | (Milli | on Bushels  | 5)                |       |       |       |       |
| Production      |   | 2,396 | 2,321 | 2,406 | 2,420 | 2,457  | 2,499       | 2,541             | 2,610 | 2,676 | 2,693 | 2,734 |
| Corn Belt       |   | 307   | 320   | 360   | 374   | 376    | 376         | 380               | 391   | 403   | 403   | 407   |
| Northern Plains |   | 1,220 | 1,212 | 1,187 | 1,190 | 1,218  | 1,245       | 1,263             | 1,287 | 1,310 | 1,322 | 1,339 |
| Southern Plains |   | 281   | 224   | 286   | 281   | 282    | 282         | 285               | 292   | 299   | 299   | 302   |
| Far West        |   | 411   | 356   | 388   | 390   | 389    | 396         | 407               | 424   | 441   | 446   | 453   |
| Other U.S.      |   | 177   | 209   | 185   | 185   | 192    | 200         | 206               | 215   | 224   | 223   | 232   |

## U.S. Wheat Land Use (continued)
| Participation Rate     Delta States     Southern Plains     Far West     Other U.S.     Base Area   15.     Delta States   3.     Southern Plains | 93     91       92     91       81     82       90     85       97     15.32       96     3.56       21     7.20       87     1.84       53     2.71   | 92<br>92<br>81<br>5 88<br>2 15.32<br>5 3.56<br>0 7.20<br>4 1.84                              | 92<br>92<br>81<br>88<br>15.32<br>3.56<br>7.20 | (i<br>91<br>91<br>78<br>87<br>(Mii<br>15.58<br>3 57 | Percent)<br>90<br>76<br>86<br>Ilion Acres)<br>15.71 | 90<br>91<br>77<br>86 | 90<br>91<br>77<br>86 | 90<br>91<br>77<br>86 | 89<br>90<br>76<br>85 | 89<br>90<br>76<br>86 |
|---|--|--|---|---|---|----------------------|----------------------|----------------------|----------------------|----------------------|
| Delta States<br>Southern Plains<br>Far West<br>Other U.S.<br>Base Area 15.<br>Delta States 3.<br>Southern Plains 7.                               | 93     94       92     94       90     85       90     85       90     85       90     85       91     15.32       92     94       90     85       90     85       91     15.32       92     15.32       93     1.84       93     2.71 | 92<br>92<br>81<br>5 88<br>2 15.32<br>5 3.56<br>0 7.20<br>4 1.84                              | 92<br>92<br>81<br>88<br>15.32<br>3.56<br>7.20 | 91<br>91<br>78<br>87<br>(Mil<br>15.58<br>3.57       | 90<br>90<br>76<br>86<br>Ilion Acres)<br>15.71       | 90<br>91<br>77<br>86 | 90<br>91<br>77<br>86 | 90<br>91<br>77<br>86 | 89<br>90<br>76<br>85 | 89<br>90<br>76<br>86 |
| Southern Plains<br>Far West<br>Other U.S.<br>Base Area 15.<br>Delta States 3.<br>Southern Plains  | 32     94       31     82       30     85       30     85       31     82       30     85       31     82       32     3.56       34     3.56       32     7.20       37     1.84       33     2.71                                    | 92<br>81<br>5 88<br>2 15.32<br>5 3.56<br>0 7.20<br>4 1.84                                    | 92<br>81<br>88<br>15.32<br>3.56<br>7.20       | 91<br>78<br>87<br>(Mil<br>15.58<br>3 57             | 90<br>76<br>86<br>Ilion Acres)<br>15.71             | 91<br>77<br>86       | 91<br>77<br>86       | 91<br>77<br>86       | 90<br>76<br>85       | 90<br>76<br>86       |
| Far WestOther U.S.Base Area15.Delta States3.Southern Plaine3.   | 81     82       90     85       97     15.32       46     3.56       21     7.20       87     1.84       53     2.71   | 2     81       5     88       2     15.32       3     3.56       0     7.20       4     1.84 | 81<br>88<br>15.32<br>3.56<br>7.20             | 78<br>87<br>(Mil<br>15.58<br>3.57                   | 76<br>86<br>Ilion Acres)<br>15.71                   | 77<br>86<br>15 78    | 77<br>86<br>15 81    | 77<br>86             | 76<br>85             | 76<br>86             |
| Other U.S. Base Area 15.<br>Delta States 3.   | 200     85       207     15.32       46     3.56       21     7.20       37     1.84       53     2.71   | 5 88<br>2 15.32<br>5 3.56<br>0 7.20<br>4 1.84  | 88<br>15.32<br>3.56<br>7.20                   | 87<br>(Mil<br>15.58<br>3 57                         | 86<br>llion Acres)<br>15.71                         | 86<br>15 78          | 86                   | 86                   | 85                   | 86                   |
| Base Area15.Delta States3.Southern Plains7.   | 07 15.32<br>46 3.56<br>21 7.20<br>37 1.84<br>53 2.71   | 2 15.32<br>3 3.56<br>7.20<br>4 1.84  | 15.32<br>3.56<br>7.20                         | (Mil<br>15.58<br>3.57                               | llion Acres)<br>15.71                               | 15 78                | 15 81                | 45.00                |                      |                      |
| Base Area15.Delta States3.Southern Dising7.   | 07     15.32       46     3.56       21     7.20       37     1.84       53     2.71   | 2 15.32<br>3.56<br>7.20<br>1.84  | 15.32<br>3.56<br>7.20                         | 15.58<br>3.57                                       | 15.71   | 15 78                | 15.81                | 45 00                |                      |                      |
| Delta States 3.   | 46 3.56<br>21 7.20<br>37 1 <u>.</u> 84<br>53 2.71  | 5 3.56<br>) 7.20<br>I 1.84   | 3.56<br>7.20                                  | 3 57  |   | 15.70                | 10.01                | 15.82                | 15.84                | 15.86                |
| Cautha and Dialana 7  | 21 7.20<br>37 1 <u>.</u> 84<br>53 2.71   | ) 7.20<br>1.84   | 7.20  | 0.07  | 3.58  | 3.58                 | 3.58                 | 3.58                 | 3.58                 | 3.58                 |
| Southern Plains 7.  | 37     1.84       53     2.71  | 1.84   |   | 7.44  | 7.55  | 7.62                 | 7.65                 | 7.66                 | 7.67                 | 7.69                 |
| Far West 1.   | 53 2.71  | ~ - 1  | 1.84  | 1.84  | 1.84  | 1.84                 | 1.84                 | 1.84                 | 1.84                 | 1.84                 |
| Other U.S. 2.   |  | 2.71   | 2.71  | 2.73  | 2.74  | 2.74                 | 2.74                 | 2.74                 | 2.74                 | 2.74                 |
| ARP, PLD, 50-92/85 Area 1.  | <b>37 1</b> .71  | 0.34   | 0.36  | 1.04  | 1.71  | 1.73                 | 1.75                 | 1.75                 | 1.73                 | 1.75                 |
| Delta States 0.   | 30 0.39  | 0.05   | 0.06  | 0.22  | 0.37  | 0.38                 | 0.38                 | 0.38                 | 0.37                 | 0.38                 |
| Southern Plains 0.  | 68 0.84  | 0.19   | 0.19  | 0.53  | 0.86  | 0.88                 | 0.88                 | 0.89                 | 0.88                 | 0.88                 |
| Far West 0.   | 18 0.20  | 0.06   | 0.07  | 0.14  | 0.20  | 0.21                 | 0.21                 | 0.21                 | 0.21                 | 0.21                 |
| Other U.S. 0.   | 21 0.27  | 0.04   | <u>0</u> .04                                  | 0.16  | 0.27  | 0.27                 | 0.27                 | 0.27                 | 0.27                 | 0.27                 |
| CRP Idled 1.  | 43 1.43  | 3 1.43   | 1.43  | 1.14  | 1.00  | 0.92                 | 0.88                 | 0.87                 | 0.85                 | 0.82                 |
| Delta States 0.   | 0.06   | 6 0.06   | 0.06  | 0.05  | 0.05  | 0.04                 | 0.04                 | 0.04                 | 0.04                 | 0.04                 |
| Southern Plains 1.  | 29 1.29  | 9 1.29   | 1.29  | 1.03  | 0.90  | 0.82                 | 0.79                 | 0.78                 | 0.76                 | 0.74                 |
| Far West 0.   | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 0.00                 | 0.00                 | 0.00                 | 0.00                 | 0.00                 |
| Other U.S. 0.   | 0.08   | 3 0.08   | 0.08  | 0.06  | 0.06  | 0.05                 | 0.05                 | 0.05                 | 0.05                 | 0.05                 |
| Net Flexed Area 0.  | 14 0.19  | 0.27   | 0.22  | 0.22  | 0.22  | 0.18                 | 0.14                 | 0.10                 | 0.11                 | 0.06                 |
| Delta States 0.   | 0.03   | 3 0.05   | 0.04  | 0.04  | 0.03  | 0.02                 | 0.01                 | 0.00                 | 0.00                 | -0.01                |
| Southern Plains 0.  | 0.05   | 5 0.07   | 0.04  | 0.05  | 0.05  | 0.03                 | 0.02                 | 0.00                 | 0.00                 | -0.01                |
| Far West -0.  | 05 -0.04   | 4 -0.02  | -0.02   | -0.02   | -0.02   | -0.03                | -0.03                | -0.04                | -0.03                | -0.04                |
| Other U.S. 0.   | 15 0.15  | 6 0.17   | 0.16  | 0.16  | 0.16  | 0.15                 | 0.14                 | 0.13                 | 0.14                 | 0.13                 |
| Payment Planted Area 10.  | 06 9.66  | 6 11.21  | 11.17   | 10.53   | 9,83  | 9.90                 | 9.92                 | 9.92                 | 9.82                 | 9.86                 |
| Delta States 2.   | 43 2.34  | 1 2.72   | 2.71  | 2.53  | 2.34  | 2.35                 | 2.35                 | 2.35                 | 2.32                 | 2.33                 |
| Southern Plains 4.  | 37 4.63  | 3 5,36   | 5.34  | 5.13  | 4.85  | 4.89                 | 4.91                 | 4.91                 | 4.87                 | 4.90                 |
| Far West 1.   | 05 1.02  | 2 1.16   | 1.14  | 1.03  | 0.94  | 0.94                 | 0.94                 | 0.94                 | 0.93                 | 0.93                 |
| Other U.S. 1.   | 72 1.67  | 7 1.97   | 1.97  | 1.84  | 1.71  | 1.72                 | 1.72                 | 1.71                 | 1.70                 | 1.70                 |
| Planted Area 13.  | 25 13.56   | 6 15.67  | 14.98   | 14.48   | 13.92   | 13.70                | 13.62                | 13.47                | 13.68                | 13.51                |
| Delta States 3.   | 21 3.16  | 6 3.62   | 3.54  | 3.38  | 3.21  | 3.17                 | 3.14                 | 3.11                 | 3.15                 | 3.10                 |
| Southern Plains 5.  | 97 5.87  | 6.69   | 6.44  | 6.34  | 6.14  | 6.04                 | 6.01                 | 5.94                 | 6.02                 | 5.94                 |
| Far West 1.   | 37 <b>1</b> .4 <sup>-</sup>  | 1 1.72   | 1.62  | 1.50  | 1.39  | 1.34                 | 1.31                 | 1.28                 | 1.31                 | 1.26                 |
| Other U.S. 2.   | 70 3.12  | 2 3.64   | 3.37  | 3.26  | 3.19  | 3.15                 | 3.16                 | 3.15                 | 3.21                 | 3.20                 |
| Harvested Area 12.  | 59 13.16   | 6 14.90  | 14.27   | 13.81   | 13.29   | 13.09                | 13.01                | 12.87                | 13.06                | 12.90                |
| Delta States 3.   | 15 3.13  | 3 3.54   | 3.47  | 3.31  | 3.15  | 3.11                 | 3.08                 | 3.05                 | 3.09                 | 3.04                 |
| Southern Plains 5.  | 45 5.54  | 4 6.19   | 5.96  | 5.87  | 5.69  | 5.60                 | 5.57                 | 5.51                 | 5.58                 | , 5.52               |
| Far West 1.   | 36 1.4 <sup>.</sup>  | 1 1.71   | 1.61  | 1.49  | 1.38  | 1.33                 | 1.30                 | 1.27                 | 1.30                 | 1.25                 |
| Other U.S. 2.   | 64 3.09  | 9 3.46   | 3.23  | 3.14  | 3.08  | 3.05                 | 3.05                 | 3.05                 | 3.09                 | 3.09                 |

U.S. Upland Cotton Land Use

|                 | 93/94 | 94/95 | 95/96 | 96/97 | 97/98 | 98/99              | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 |
|-----------------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|-------|
| Yield           |       |       |       |       | (Pour | ids per Acr        | e)    |       |       |       |       |
| Delta States    | 572   | 830   | 743   | 753   | 768   | 782                | 790   | 797   | 804   | 807   | 815   |
| Southern Plains | 479   | 460   | 483   | 490   | 497   | 504                | 510   | 516   | 522   | 527   | 533   |
| Far West        | 1,309 | 1,197 | 1,200 | 1,222 | 1,247 | 1,271              | 1,286 | 1,297 | 1,308 | 1,309 | 1,322 |
| Other U.S.      | 521   | 802   | 626   | 638   | 644   | 650                | 654   | 656   | 660   | 661   | 664   |
|                 |       |       |       |       | (Mil  | lion Bales)        |       |       |       |       |       |
| Production      | 15.76 | 19.39 | 20.49 | 19.93 | 19.45 | 18.91 <sup>´</sup> | 18.78 | 18.79 | 18.73 | 19.12 | 19.01 |
| Delta States    | 3.75  | 5.41  | 5.48  | 5.44  | 5.29  | 5.13               | 5.12  | 5.12  | 5.11  | 5.19  | 5.16  |
| Southern Plains | 5.44  | 5.31  | 6.23  | 6.09  | 6.07  | 5.97               | 5.95  | 5.99  | 6.00  | 6.13  | 6.13  |
| Far West        | 3.71  | 3.51  | 4.27  | 4.10  | 3.87  | 3.64               | 3.55  | 3.50  | 3.45  | 3.53  | 3.45  |
| Other U.S.      | 2.86  | 5.16  | 4.51  | 4.29  | 4.21  | 4.16               | 4.15  | 4.17  | 4.19  | 4.26  | 4.27  |

### U.S. Upland Cotton Land Use (continued)

|                         | 93/94   | 94/95  | 95/96  | 96/97  | 97/98    | 98/99        | 99/00  | 00/01  | 01/02   | 02/03  | 03/04  |
|-------------------------|---------|--------|--------|--------|----------|--------------|--------|--------|---------|--------|--------|
| Participation Rate      |         |        |        |        | (        | Percent)     |        |        |         |        |        |
| Delta States            | 97      | 96     | 97     | 98     | 98       | 98           | 98     | 97     | 97      | 97     | 97     |
| Southern Plains         | 95      | 94     | 95     | 95     | 95       | 95           | 95     | 95     | 95      | 95     | 95     |
| Far West                | 97      | 97     | 97     | 97     | 97       | 97           | 97     | 97     | 96      | 96     | 96     |
|                         |         |        |        |        | (Mil     | llion Acres) | )      |        |         |        |        |
| Base Area               | 4.12    | 4.13   | 4.13   | 4.13   | 4.13     | 4.14         | 4.14   | 4.14   | 4.14    | 4.14   | 4.14   |
| Delta States            | 2.91    | 2.93   | 2.93   | 2.93   | 2.93     | 2.93         | 2.94   | 2.94   | 2.94    | 2.94   | 2.94   |
| Southern Plains         | 0.60    | 0.60   | 0.60   | 0.60   | 0.60     | 0.60         | 0.60   | 0.60   | 0.60    | 0.60   | 0.60   |
| Far West                | 0.60    | 0.60   | 0.60   | 0.60   | 0.60     | 0.60         | 0.60   | 0.60   | 0.60    | 0.60   | 0.60   |
| ARP, PLD, 50-92/85 Area | 0.67    | 0.26   | 0.63   | 0.47   | 0.48     | 0.49         | 0.49   | 0.50   | 0.49    | 0.51   | 0.51   |
| Delta States            | 0.41    | 0.11   | 0.34   | 0.22   | 0.22     | 0.23         | 0.23   | 0.23   | 0.23    | 0.24   | 0.24   |
| Southern Plains         | 0.19    | 0.12   | 0.21   | 0.20   | 0.20     | 0.21         | 0.21   | 0.21   | 0.21    | 0.22   | 0.22   |
| Far West                | 0.07    | 0.02   | 0.08   | 0.05   | 0.05     | 0.05         | 0.05   | 0.05   | 0.05    | 0.05   | 0.05   |
| CRP Idled               | 0.01    | 0.01   | 0.01   | 0.01   | 0.01     | 0.01         | 0.01   | 0.00   | 0.00    | 0.00   | 0.00   |
| Delta States            | 0.01    | 0.01   | 0.01   | 0.01   | 0.01     | 0.01         | 0.01   | 0.00   | 0.00    | 0.00   | 0.00   |
| Southern Plains         | 0.00    | 0.00   | 0.00   | 0.00   | 0.00     | 0.00         | 0.00   | 0.00   | 0.00    | 0.00   | 0.00   |
| Far West                | 0.00    | 0.00   | 0.00   | 0.00   | 0.00     | 0.00         | 0.00   | 0.00   | 0.00    | 0.00   | 0.00   |
| Net Flexed Area         | -0.31   | -0.28  | -0.31  | -0.31  | -0.31    | -0.31        | -0.31  | -0.32  | -0.32   | -0.32  | -0.32  |
| Delta States            | -0.27   | -0.23  | -0.26  | -0.26  | -0.26    | -0.26        | -0.26  | -0.26  | -0.26   | -0.27  | -0.27  |
| Southern Plains         | -0.02   | -0.02  | -0.02  | -0.02  | -0.02    | -0.02        | -0.02  | -0.02  | -0.02   | -0.02  | -0.02  |
| ⊢ar West                | -0.02   | -0.03  | -0.03  | -0.03  | -0.03    | -0.03        | -0.03  | -0.03  | -0.03   | -0.03  | -0.03  |
| Payment Planted Area    | 2.68    | 3.01   | 2.72   | 2.89   | 2.89     | 2.88         | 2.87   | 2.87   | 2.86    | 2.85   | 2.84   |
| Delta States            | 1.96    | 2.21   | 2.05   | 2.18   | 2.18     | 2.18         | 2.18   | 2.17   | 2.17    | 2.16   | 2.16   |
| Southern Plains         | 0.29    | 0.35   | 0.26   | 0.28   | 0.27     | 0.27         | 0.27   | 0.27   | 0.27    | 0.26   | 0.26   |
| Far West                | 0.42    | 0.45   | 0.40   | 0.43   | 0.43     | 0.43         | 0.43   | 0.43   | 0.43    | 0.43   | 0.43   |
| Planted Area            | 2.92    | 3.35   | 2.99   | 3.14   | 3.13     | 3.14         | 3.13   | 3.12   | 3.12    | 3.08   | 3.08   |
| Delta States            | 2.18    | 2.51   | 2.28   | 2.38   | 2.38     | 2.40         | 2.39   | 2.39   | 2.39    | 2.36   | 2.36   |
| Southern Plains         | 0.30    | 0.36   | 0.28   | 0.30   | 0.29     | 0.29         | 0.28   | 0.28   | 0.28    | 0.27   | 0.27   |
| Far West                | 0.44    | 0.49   | 0.44   | 0.46   | 0.46     | 0.46         | 0.46   | 0.45   | 0.45    | 0.45   | 0.44   |
| Harvested Area          | 2.83    | 3.32   | 2.95   | 3.09   | 3.08     | 3.09         | 3.08   | 3.07   | 3.07    | 3.04   | 3.03   |
| Delta States            | 2.10    | 2.48   | 2.24   | 2.34   | 2.33     | 2.36         | 2.35   | 2.35   | 2.35    | 2.32   | 2.32   |
| Southern Plains         | 0.30    | 0.35   | 0.28   | 0.29   | 0.29     | 0.28         | 0.28   | 0.28   | 0.28    | 0.27   | 0.27   |
| ⊢ar West                | 0.44    | 0.49   | 0.43   | 0.46   | 0.46     | 0.45         | 0.45   | 0.45   | 0.45    | 0.44   | 0.44   |
| N# 13                   | = = ( 0 | = 00 / |        |        | (Pour    | nds per Ac   | re)    |        |         | = 000  |        |
| Yield                   | 5,510   | 5,964  | 5,787  | 5,805  | 5,827    | 5,845        | 5,866  | 5,887  | 5,908   | 5,932  | 5,952  |
| Delta States            | 4,945   | 5,462  | 5,281  | 5,296  | 5,311    | 5,326        | 5,340  | 5,354  | 5,368   | 5,382  | 5,396  |
| Southern Plains         | 5,401   | 6,003  | 6,070  | 6,067  | 6,094    | 6,120        | 6,140  | 6,163  | 6,179   | 6,204  | 6,223  |
| Far West                | 8,300   | 8,500  | 8,213  | 8,222  | 8,292    | 8,363        | 8,434  | 8,506  | 8,574   | 8,647  | 8,716  |
| Due des Harr            | 450.11  | 407 70 |        | 470.00 | (Million | Hundredwe    | eight) | 100.01 | 101 - 1 | 100.17 | 100.00 |
| Production              | 156.11  | 197.78 | 170.66 | 1/9.30 | 1/9.44   | 180.86       | 180.90 | 180.94 | 181.54  | 180.17 | 180.39 |
| Delta States            | 103.74  | 135,30 | 118.09 | 123.70 | 123,94   | 125.48       | 125.48 | 125.64 | 126.01  | 124.96 | 125.16 |
| Southern Plains         | 16.09   | 21.25  | 16.90  | 17.85  | 17.58    | 17.36        | 17.31  | 17.16  | 17.24   | 16.94  | 16.90  |
|                         | 30.21   | 41.22  | 00.00  | 37.70  | 37.9Z    | 38.01        | 30.11  | 30.14  | 30.28   | 38.21  | 38.33  |

U.S. Rice Land Use

# **U.S. Net Returns for Eight Crops**

- Despite lower prices, higher yields brought about higher **participant per-acre net returns** for corn, grain sorghum, cotton, and rice in 1994/95. With the exception of barley, all participant net returns are projected to be lower in 1995/96. Only corn returns increase over the projection period as frozen target prices and program yields cause participant net returns to decline generally.
- Nonparticipant net returns follow movements in market prices throughout the projection period. Nonparticipant returns for grain sorghum, barley, oats, cotton, and rice decline throughout the late 1990s as cost increases more than offset yield increases. Stronger prices provide some support for returns in the later years of the projection period.
- Aggregate net returns, including disaster payments, rose by over \$5 billion in 1994/95 with record yields and increased acreage.
- Total returns should decrease in 1995/96 with lower yields. Total returns generally increase after 1995/96 with stronger market prices and increased acreage due to the expiration of CRP contracts.

|                               | 93/94            | 94/95                        | 95/96            | 96/97            | 97/98            | 98/99            | 99/00            | 00/01            | 01/02            | 02/03            | 03/04            |
|-------------------------------|------------------|------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Net Returns                   |                  |                              | -                |                  |                  |                  |                  |                  |                  |                  |                  |
| Wheat                         |                  |                              |                  |                  | (Doll            | ars ner Aci      | re)              |                  |                  |                  |                  |
| Participant<br>Nonparticipant | 95.01<br>70.45   | 89.30<br>73.90               | 89.22<br>70.17   | 88.17<br>63.00   | 87.22<br>57.62   | 86.51<br>57.68   | 86.84<br>61.86   | 87.30<br>67.65   | 87.16<br>69.22   | 87.39<br>71.58   | 87.37<br>74.80   |
| Corn                          |                  |                              | ÷.*              |                  |                  |                  |                  |                  |                  |                  |                  |
| Participant<br>Nonparticipant | 125.57<br>111.35 | 200.28<br>146.86             | 160.24<br>134.19 | 163.16<br>126.64 | 160.90<br>112.90 | 165.40<br>126.38 | 164.15<br>125.46 | 168.06<br>127.54 | 170.48<br>136.69 | 171.36<br>130.52 | 173.86<br>140.25 |
| Sorghum                       |                  |                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Participant<br>Nonparticipant | 74.65<br>60.07   | 95.35<br>65.62               | 81.39<br>61.95   | 79.78<br>55.92   | 77.13<br>45.43   | 78.05<br>50.98   | 76.91<br>50.52   | 76.25<br>51.65   | 76.53<br>56.32   | 75.19<br>54.90   | 75.04<br>58.76   |
| Barley                        |                  |                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Participant<br>Nonparticipant | 70.47<br>52.95   | 60.91<br>47.48               | 64.60<br>58.62   | 63.99<br>57.04   | 61.26<br>48.24   | 60.76<br>47.69   | 59.57<br>46.75   | 58.58<br>46.39   | 58.51<br>48.47   | 57.48<br>48.43   | 57.12<br>50.56   |
| Oats                          |                  |                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Participant<br>Nonparticipant | 46.80<br>40.17   | 46.6 <sup>⁄</sup> 7<br>34.49 | 44.97<br>38.52   | 45.68<br>42.17   | 43.86<br>38.29   | 42.07<br>36.42   | 40.36<br>35.55   | 39.03<br>35.32   | 38.21<br>36.00   | 36.40<br>34.48   | 34.65<br>33.31   |
| Soybeans                      | 131.00           | 144.14                       | 113.75           | 122.75           | 121.71           | 120.66           | 125.21           | 129.16           | 135.61           | 143.43           | 146.34           |
| Cotton                        |                  |                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Participant                   | 198.65           | 240.19                       | 218.63           | 221.91           | 217.62           | 218.33           | 214.34           | 203.71           | 184.28           | 179.86           | 172.76           |
| Nonparticipant                | 137.92           | 242.13                       | 171.57           | 168.02           | 163.99           | 152.76           | 141.11           | 130.64           | 146.58           | 127.54           | 134.93           |
| Rice                          |                  |                              |                  |                  |                  | •                |                  |                  |                  |                  |                  |
| Participant                   | 275.84           | 308.43                       | 275.34           | 284.43           | 279.07           | 266.32           | 254.24           | 238.73           | 228.39           | 215.38           | 196.56           |
| Nonparticipant                | 114.48           | 35.62                        | 31.94            | 25.37            | 24.11            | 24.99            | 22.56            | 23.92            | 17.40            | 17.58            | 21.23            |
|                               |                  |                              |                  |                  | (Bill            | ion Dollars      | )                |                  |                  |                  |                  |
| Total Net Returns             | 31.58            | 36.76                        | 30.82            | 31.27            | 30.87            | 31.54            | ´ 31.80          | 32.35            | 33.03            | 33.29            | 33.87            |
| Wheat                         | 6.46             | 6.05                         | 6.03             | 5.88             | 5.88             | 5.95             | 6.09             | 6.31             | 6,40             | 6.44             | 6.54             |
| Corn                          | 9.73             | 14.62                        | 12.36            | 12.48            | 12.03            | 12.57            | 12.59            | 12.84            | 13.21            | 13.11            | 13.44            |
| Sorghum                       | 0.75             | 0.87                         | 0.78             | 0.78             | 0.77             | 0.80             | 0.81             | 0.81             | 0.82             | 0.80             | 0.81             |
| Barley                        | 0.54             | 0.44                         | 0.48             | 0.52             | 0.52             | 0.51             | 0.50             | 0.50             | 0.49             | 0.48             | 0.48             |
| Oats                          | 0.33             | 0.25                         | 0.29             | 0.30             | 0.29             | 0.27             | 0.27             | 0.26             | 0.26             | 0,24             | 0.23             |
| Soybeans                      | 7.88             | 8.93                         | 6.77             | 7.28             | 7.40             | 7.49             | 7.76             | 8.07             | 8.50             | 8.99             | .9.29            |
| Cotton                        | 2.65             | 3.62                         | 3.22             | 3.12             | 3.09             | 3.07             | 2.96             | 2.79             | 2.61             | 2.51             | 2.44             |
| Rice                          | 0.89             | 0.99                         | 0.90             | 0.92             | 0.91             | 0.87             | 0.83             | 0.78             | 0.74             | 0.70             | 0.64             |
| Disaster Payments             | 2.34             | 1.00                         | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             |

# U.S. Net Returns for Eight Crops

## **U.S. Agricultural Exports**

• The volume of agricultural exports increases by nearly 20 percent in fiscal year 1995, mainly due to low feed-grain and oilseed prices resulting from large crops. Total agricultural exports are not expected to reach 1995 levels again until 1999 as prices increase in the next few years.

• The volume of animal and animal products exports exhibits steady growth through 2001 as GATT implementation increases access to importing markets and reduces subsidized exports of competing countries. Grains and feeds exports decline slightly in 1996 and 1997 as prices increase relative to 1995, but increase after that time as increasing livestock production leads to increased feed demand. Oilseeds and products show a similar pattern in exports as grains and feeds.

• Reductions in the value of grains and feeds exports through 1998 are offset by increases in the value of livestock and products exports, maintaining a relatively stable value of exports. Because of the increased volume of exports along with increasing prices of many commodities under the GATT agreement, the value of agricultural exports increases steadily beginning in 1999, and reaches more than 60 billion dollars in 2004.

• The value of other products exports is expected to grow impressively over the next ten years because of increases in export volume and prices of fruits, nuts, and vegetables.

| · · ·                       | 1994    | 1995     | 1996    | 1997    | 1998       | 1999       | 2000       | 2001    | 2002    | 2003    | 2004    |
|-----------------------------|---------|----------|---------|---------|------------|------------|------------|---------|---------|---------|---------|
|                             |         | <u>.</u> | -       | (1      | 1,000 Metr | ic Tons, F | scal Year) | · •.    |         |         |         |
| Total                       | 126,883 | 150,905  | 144,111 | 144,687 | 148,722    | 153,875    | 158,797    | 163,411 | 167,638 | 172,383 | 178,063 |
| Animals and Animal Products | 4,203   | 4,549    | 4,500   | 4,763   | 5,237      | 5,504      | 5,811      | 6,087   | 6,085   | 6,055   | 6,161   |
| Grains and Feeds            | 88,090  | 105,867  | 102,255 | 102,242 | 105,137    | 109,271    | 112,990    | 116,512 | 119,787 | 123,564 | 128,044 |
| Wheat (Unmilled and Flour)  | 32,229  | 33,576   | 32,074  | 31,805  | 32,801     | 34,684     | 36,622     | 37,686  | 38,246  | 39,133  | 40,239  |
| Rice (Paddy Milled)         | 2,433   | 2,418    | 2,230   | 2,259   | 2,258      | 2,267      | 2,238      | 2,209   | 2,165   | 2,105   | 2,068   |
| Feed Grains and Products    | 40,441  | 56,731   | 54,106  | 53,369  | 54,601     | 56,068     | 57,147     | 58,957  | 60,896  | 63,169  | 65,971  |
| Other Grains and Feeds      | 12,987  | 13,143   | 13,845  | 14,809  | 15,478     | 16,252     | 16,982     | 17,661  | 18,481  | 19,157  | 19,765  |
| Oilseeds and Products       | 24,051  | 30,137   | 27,413  | 27,746  | 28,283     | 28,728     | 29,302     | 29,799  | 30,443  | 31,092  | 31,786  |
| Cotton (excl. Linters)      | 1,566   | 2,071    | 1,885   | 1,778   | 1,637      | 1,578      | 1,530      | 1,497   | 1,481   | 1,464   | 1,438   |
| Other Products              | 8,973   | 8,283    | 8,057   | 8,158   | 8,428      | 8,795      | 9,164      | 9,517   | 9,841   | 10,208  | 10,634  |

### Quantity of U.S. Agricultural Exports

### Value of U.S. Agricultural Exports

|                              | 1994   | 1995 <sup>.</sup> | 1996   | 1997   | 1998        | 1999         | 2000     | 2001   | 2002       | 2003   | 2004   |
|------------------------------|--------|-------------------|--------|--------|-------------|--------------|----------|--------|------------|--------|--------|
|                              |        |                   |        |        | (Million Do | ollars, Fisc | al Year) |        | - <u>-</u> |        |        |
| Total                        | 43,511 | 46,428            | 46,018 | 46,938 | 48,413      | 50,142       | 52,837   | 55,488 | 56,740     | 58,154 | 60,408 |
| Animals and Animal Products  | 8,654  | 9,354             | 9,803  | 10,764 | 11,982      | 12,418       | 13,725   | 14,825 | 14,540     | 14,446 | 14,870 |
| Meat and Meat Products       | 3,503  | 3,827             | 4,396  | 5,214  | 5,970       | 5,900        | 6,709    | 7,358  | 6,735      | 6,317  | 6,461  |
| Poultry and Poultry Products | 1,718  | 1,960             | 1,811  | 1,792  | 1,997       | 2,277        | 2,447    | 2,620  | 2,812      | 2,950  | 3,080  |
| Dairy Products               | 709    | 736               | 698    | 682    | 679         | 678          | 675      | 675    | 677        | 679    | 677    |
| Hides and Skins              | 1,439  | 1,541             | 1,640  | 1,742  | 1,908       | 2,104        | 2,324    | 2,526  | 2,691      | 2,872  | 3,004  |
| Other Animal Products        | 1,286  | 1,291             | 1,259  | 1,335  | 1,428       | 1,459        | 1,571    | 1,647  | 1,625      | 1,628  | 1,648  |
| Grains and Feeds             | 13,130 | 14,446            | 14,168 | 13,710 | 13,576      | 14,358       | 15,023   | 15,842 | 16,514     | 17,063 | 18,081 |
| Wheat (Unmilled and Flour)   | 4,274  | 4,891             | 4,503  | 4,182  | 4,102       | 4,376        | 4,825    | 5,257  | 5,431      | 5,678  | 6,028  |
| Rice (Paddy Milled)          | 889    | 784               | 743    | 752    | 758         | 772          | 774      | 779    | 769        | 763    | 768    |
| Feed Grains and Products     | 4,744  | 5,945             | 6,041  | 5,802  | 5,637       | 6,023        | 6,156    | 6,433  | 6,844      | 7,035  | 7,579  |
| Corn                         | 3,817  | 5,058             | 5,141  | 4,913  | 4,754       | 5,118        | 5,242    | 5,489  | 5,859      | 6,033  | 6,531  |
| Other Feed Grains            | 927    | 887               | 901    | 889    | 883         | 905          | 914      | 944    | 985        | 1,002  | 1,048  |
| Other Grains and Feeds       | 3,223  | 2,825             | 2,882  | 2,975  | 3,080       | 3,187        | 3,268    | 3,373  | 3,469      | 3,588  | 3,707  |
| Oilseeds and Products        | 6,856  | 7,380             | 6,750  | 7,061  | 7,182       | 7,294        | 7,549    | 7,782  | 8,127      | 8,517  | 8,816  |
| Soybeans                     | 4,161  | 4,644             | 4,393  | 4,580  | 4,595       | 4,608        | 4,750    | 4,914  | 5,137      | 5,364  | 5,515  |
| Other Oilseeds and Products  | 2,695  | 2,736             | 2,357  | 2,481  | 2,588       | 2,686        | 2,799    | 2,867  | 2,990      | 3,153  | 3,301  |
| Cotton (excl. Linters)       | 2,287  | 2,901             | 2,655  | 2,461  | 2,278       | 2,169        | 2,106    | 2,069  | 2,053      | 2,056  | 2,019  |
| Other Products               | 12,584 | 12,347            | 12,641 | 12,941 | 13,395      | 13,903       | 14,434   | 14,970 | 15,506     | 16,072 | 16,621 |

### **U.S. Government Costs**

- Net CCC outlays are projected at \$9.23 billion for fiscal year 1995, down \$310 million from the 1994 level. Increased outlays for feed grains are offset by savings in wheat, cotton, and disaster payments. Net outlays are projected to range between \$8 and \$8.5 billion through 2000 as prices remain relatively stable. After fiscal year 2000, outlays decline as commodity prices improve.
- Feed-grain program costs are projected to increase to \$3.57 billion in fiscal year 1995. This represents a \$2.60 billion increase from the 1994 level. The increase can be attributed to a \$1.1 billion increase in deficiency payments and \$1.5 billion increase in net stock outlays. Feed-grain outlays remain above \$3 billion through 2002 and then decline as prices strengthen.
- With stronger wheat prices, **program expenditures for wheat** are projected to fall to \$0.95 billion in fiscal year 1995. As prices weaken, costs increase through 1998, reaching a high of \$1.93 billion. Outlays decline at the end of the projection period as prices increase.
- Cotton program costs for fiscal year 1995 are projected to decline by almost \$1 billion from the 1994 level of \$1.54 billion. As cotton prices weaken from the high levels of the 1994/95 marketing year, net outlays increase in fiscal year 1996 and range between \$780 million and \$1.2 billion throughout the projection period.
- With rice prices projected to fall below the loan rate for the 1994/95 marketing year, net outlays for rice are projected to increase to \$1.17 billion for fiscal year 1995. As rice prices grow stronger, outlays decline throughout the projection period but remain above \$500 million.
- **Dairy program net expenditures** are projected to remain below \$300 million throughout the projection period as revenue from producer assessments partially offsets product purchases.
- Net outlays for the export programs are projected at \$1.15 billion for fiscal year 1995. This includes \$876 million under the **Export Enhancement Program** and \$107 million under the **Market Promotion Program**. Funding for the Export Enhancement Program declines to \$411 million by fiscal year 2001 due to constraints under the GATT agreement.
- Outlays under the **Conservation Reserve Program** are projected to increase to \$1.92 billion by fiscal year 1997 with 38 million acres enrolled in the program. Extension of a portion of the contracts maintains spending above \$1 billion throughout the projection period.

|                        | 1994  | 1995  | 1996 | 1997  | 1998         | 1999        | 2000  | 2001    | 2002   | 2003 | 2004 |
|------------------------|-------|-------|------|-------|--------------|-------------|-------|---------|--------|------|------|
| CCC                    |       |       |      |       | (Billion Dol | lars. Fisca | Year) | · · · · |        |      |      |
| Feed Grains            | 0.97  | 3.57  | 3.23 | 3.30  | 3.36         | 3.65        | 3.48  | 3.21    | 3.11   | 2.83 | 2.27 |
| Corn                   | 0.62  | 3.12  | 2.84 | 2.87  | 2,87         | 3.14        | 2.99  | 2.76    | 2.71   | 2.47 | 1.99 |
| Sorghum                | 0.13  | 0.20  | 0.25 | 0.26  | 0.28         | 0.29        | 0.27  | 0.24    | 0.22   | 0.19 | 0.15 |
| Barley                 | 0.20  | 0.17  | 0.12 | 0.15  | 0.18         | 0.19        | 0.19  | 0.18    | 0.16   | 0.15 | 0.12 |
| Oats                   | .0.01 | 0.03  | 0.01 | 0.01  | 0.01         | 0.01        | 0.01  | 0.01    | 0.01   | 0.00 | 0.00 |
| Wheat                  | 1.73  | 0.95  | 1.60 | 1.91  | 1.93         | 1.71        | 1.43  | 1.28    | 1.18   | 1.01 | 0.76 |
| Soybeans               | -0.18 | -0.05 | 0.00 | 0.00  | 0.00         | 0.00        | 0.00  | 0.00    | 0.00   | 0.00 | 0.00 |
| Cotton                 | 1.54  | 0.58  | 0.78 | 0.83  | 0.95         | 1.10        | 1.18  | 1.06    | 0.84   | 0.90 | 0.80 |
| Rice                   | 0.84  | 1.17  | 0.85 | 0.89  | 0.85         | 0.80        | 0.75  | 0.70    | 0.68   | 0.62 | 0.55 |
| Dairy                  | 0.16  | 0.24  | 0.29 | 0.29  | 0.28         | 0.29        | 0.28  | 0.27    | 0.27   | 0.25 | 0.24 |
| Export Programs        | 1.25  | 1.15  | 0.92 | 0.87  | 0.78         | 0.68        | 0.59  | 0.52    | 0.52   | 0.52 | 0.52 |
| Net Interest           | -0.02 | 0.06  | 0.06 | 0.07  | 0.08         | 0.08        | 0.06  | 0.06    | 0.04   | 0.05 | 0.02 |
| Disaster Payments      | 2.56  | 1.08  | 0.08 | 0.08  | 0.08         | 0.08        | 0.08  | 0.08    | 0.08   | 0.08 | 0.08 |
| Other Net Costs        | 0.70  | 0.49  | 0.36 | 0.24  | 0.12         | 0.14        | 0.35  | 0.38    | 0.37   | 0.37 | 0.37 |
| Net CCC Outlays        | 9.54  | 9.23  | 8.16 | 8.48  | 8.43         | 8.53        | 8.19  | 7.56    | 7.09   | 6.63 | 5.62 |
| Conservation Reserve   | 1.82  | 1.81  | 1.82 | 1.92  | 1.58         | 1.37        | 1.22  | 1.10    | 1.09   | 1.06 | 1.02 |
| Total Government Costs | 11.36 | 11.04 | 9.99 | 10.40 | 10.01        | 9.90        | 9.41  | 8.66    | . 8.18 | 7.68 | 6.64 |

Total Government Costs, by Program (CCC Accounting)

### Total Government Costs, by Function (CCC Accounting)

| The second se | •     |       |      |       |             |              |          |      |      |        |      |
|---|-------|-------|------|-------|-------------|--------------|----------|------|------|--------|------|
|   | 1994  | 1995  | 1996 | 1997  | 1998        | 1999         | 2000     | 2001 | 2002 | 2003   | 2004 |
| Direct Payments   |       |       |      |       | (Billion Do | llars, Fisca | al Year) |      | · ·  | ···· · |      |
| Deficiency Payments   | 4.88  | 4.72  | 5.85 | 6.58  | 6.92        | 6.99         | 6.55     | 5.90 | 5.49 | 4.95   | 4.08 |
| Diversion Payments  | 0.00  | 0.00  | 0.00 | 0.00  | 0.00        | 0.00         | 0.00     | 0.00 | 0.00 | 0.00   | 0.00 |
| Producer Storage  | 0.01  | 0.04  | 0.07 | 0.08  | 0.03        | 0.00         | 0.00     | 0.00 | 0.00 | 0.00   | 0.00 |
| Conservation Reserve  | 1.82  | 1.81  | 1.82 | 1.92  | 1.58        | 1.37         | 1.22     | 1.10 | 1.09 | 1.06   | 1.02 |
| Disaster Payments   | 2.56  | 1.08  | 0.08 | 0.08  | 0.08        | 0.08         | 0.08     | 0.08 | 0.08 | 0.08   | 0.08 |
| Total Direct Payments   | 9.27  | 7.65  | 7.83 | .8.66 | 8.61        | 8.44         | 7.85     | 7.08 | 6.66 | 6.09   | 5.18 |
| Stock Outlays   |       |       |      |       |             |              |          |      |      |        |      |
| Loans Made  | 4.59  | 9.11  | 7.11 | 7.71  | 8.54        | 8.01         | 7.54     | 7.34 | 6.58 | 6.76   | 6.40 |
| Loans Repaid  | 4.86  | 7.89  | 6.74 | 7.64  | 8.61        | 8.00         | 7.51     | 7.25 | 6.53 | 6.61   | 6.36 |
| Storage and Handling  | 0.09  | 0.10  | 0.10 | 0.10  | 0.10        | 0.10         | 0.10     | 0,10 | 0.10 | 0.10   | 0.10 |
| Net Dairy Purchases   | 0.15  | 0.24  | 0.29 | 0.29  | 0.29        | 0.30         | 0.31     | 0.30 | 0.30 | 0.29   | 0.29 |
| Net Stock Outlays   | -0.04 | 1.56  | 0.77 | 0.46  | 0.32        | 0.41         | 0.43     | 0.49 | 0.45 | 0.54   | 0.43 |
| Other Net Costs   | 2.13  | 1.83  | 1.39 | 1.29  | 1.08        | 1.04         | 1.13     | 1.09 | 1.06 | 1.06   | 1.03 |
| Total Government Costs  | 11.36 | 11.04 | 9.99 | 10.40 | 10.01       | 9.90         | 9.41     | 8.66 | 8.18 | 7.68   | 6.64 |
|   |       |       |      |       |             | _            |          |      |      |        |      |

## **U.S. Cash Receipts from Farm Marketings**

- Estimates of 1995 cash receipts from farm marketings suggest an expansion of \$3.1 billion from the 1994 level of \$176.01 billion. Receipts show little growth through 1997 but expand after that as cattle receipts increase.
- The record corn crop in the 1994/95 marketing year will push feed-grain cash receipts to \$21.03 billion for 1995. Receipts remain relatively stable until 1999, but then expand as prices strengthen and acreage increases with lower ARP rates.
- Food-grain cash receipts for 1995 are projected to be slightly lower than 1994 levels due to lower rice receipts. The lower rice receipts are the result of dramatically lower rice prices for the 1994/95 crop. Wheat cash receipts remain flat through 1999 as wheat prices remain low due to a sagging export market. Recovery begins in 2000 as prices strengthen with expanding exports. Rice receipts show marginal growth at the end of the projection period as rice prices strengthen.
- Oilseed cash receipts for 1995 will reach \$14.37 billion due to the record soybean crop produced in 1994/95. The assumption of trend yields coupled with reduced acreage causes a \$1.26 billion decline in cash receipts for 1996. Cash receipts grow after 1996 as both production and prices increase.
- Strong market prices push cotton receipts to \$7.19 billion for 1995. Receipts remain strong for 1996 as production expands for the 1995/96 marketing year. Receipts range between \$6 and \$7 billion over the projection period as price and production remain relatively stable.
- Cash receipts from red meats for 1995 remain unchanged from the 1994 level of \$46.69 billion as lower cattle receipts are offset by higher hog receipts. Receipts remain below the 1995 level through 1999 as gains in pork are offset by declines in beef. As the beef cycle turns and prices recover, cattle receipts increase to \$41.02 billion by 2003.
- With lower milk prices, dairy receipts decline to \$19.55 billion in 1995. After 1995, receipts grow through the end of the projection period.
- With continued demand growth and expanding production, cash receipts of poultry and eggs are projected to increase in each year of the projection period. Receipts increase from \$18.09 billion in 1995 to \$26.12 billion in 2004.

|                                       | 1994   | 1995   | 1996   | 1997   | 1998   | 1999         | 2000   | 2001   | 2002   | 2003           | 2004   |
|---------------------------------------|--------|--------|--------|--------|--------|--------------|--------|--------|--------|----------------|--------|
| Farm Marketings                       |        |        |        |        | (Bill  | lion Dollars | 5)     |        |        |                |        |
| and CCC Loans                         | 176.01 | 179.14 | 179.43 | 179.90 | 181.73 | 186.73       | 193.50 | 200.29 | 203.87 | 208.23         | 212.00 |
| Crops                                 | 88.64  | 92.08  | 90.82  | 91.75  | 92.53  | 94.43        | 96.71  | 99.33  | 101.67 | 104.07         | 107.18 |
| Feed Grains                           | 19.24  | 21.03  | 20.64  | 20.65  | 20.55  | 21.13        | 21.50  | 22.07  | 22.58  | 23.04          | 24.04  |
| Corn                                  | 14.06  | 15.84  | 15.34  | 15.28  | 15.10  | 15.65        | 16.09  | 16.70  | 17.23  | 17.63          | 18.46  |
| Sorghum                               | 1.14   | 1.16   | 1.18   | 1.17   | 1.19   | 1.23         | 1.26   | 1.30   | 1.33   | 1.36           | 1.42   |
| Barley                                | 0.66   | 0.70   | 0.78   | 0.81   | 0.79   | 0.79         | 0.80   | 0.81   | 0.83   | 0.85           | 0.89   |
| Oats                                  | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14         | 0.14   | 0.15   | 0.15   | 0.15           | 0.15   |
| Hay                                   | 3.25   | 3.19   | 3.20   | 3.26   | 3.33   | 3.32         | 3.21   | 3.11   | 3.04   | 3.04           | 3.12   |
| Food Grains                           | 8.87   | 8.83   | 8.40   | 8.15   | 8.29   | 8.73         | 9.41   | 9.85   | 10.13  | 10.58          | 11.05  |
| Wheat                                 | 7.55   | 7.58   | 7.20   | 6.91   | 7.03   | 7.45         | 8.11   | 8.53   | 8.79   | 9.21           | 9,66   |
| Rice                                  | 1.15   | 1.07   | 1.04   | 1.07   | 1.09   | 1.11         | 1.13   | 1.15   | 1.17   | 1.20           | 1.23   |
| Rye                                   | 0.17   | 0.17   | 0.17   | 0.17   | 0.17   | 0.17         | 0.17   | 0.17   | 0.17   | 0.17           | 0.17   |
| Oilseeds                              | 14.23  | 14.37  | 13.11  | 13.60  | 13,92  | 14.25        | 14.66  | 15.18  | 15.80  | 16.39          | 17.13  |
| Cotton                                | 6.55   | 7.19   | 6.97   | 6.69   | 6.38   | 6.21         | 6.14   | 6.30   | 6.37   | 6.45           | 6.57   |
| Sugar                                 | 2.17   | 2.21   | 2.21   | 2.23   | 2.25   | 2.27         | 2.30   | 2.32   | 2.34   | 2.37           | 2.39   |
| Other Crops*                          | 37.59  | 38.46  | 39.49  | 40.45  | 41.14  | 41.83        | 42.69  | 43.61  | 44.46  | 45.25          | 46.00  |
| Livestock & Products                  | 87.37  | 87.05  | 88.61  | 88.15  | 89.20  | 92.30        | 96.79  | 100.96 | 102.19 | 104.16         | 104.81 |
| Red Meats                             | 46.69  | 46.69  | 46.87  | 44.80  | 44.95  | 46.62        | 49,33  | 51.72  | 51.96  | 52.98          | 52.18  |
| Cattle, Calves                        | 36.42  | 36.23  | 35.62  | 33.91  | 34.64  | 35.82        | 37.42  | 39.57  | 40.45  | 41.02          | 39.50  |
| Hogs                                  | 9.77   | 9.97   | 10.75  | 10.40  | 9.82   | 10.31        | 11.42  | 11.65  | 11.02  | 11.47          | 12.19  |
| Sheep, Lambs                          | 0.49   | 0.49   | 0.49   | 0.49   | 0.49   | 0.49         | 0.49   | 0.49   | 0.49   | 0.49           | 0.49   |
| · · · · · · · · · · · · · · · · · · · |        |        |        |        |        |              |        |        |        | and the second |        |
| Dairy Products                        | 20.01  | 19.55  | 19.71  | 20.17  | 20.66  | 21.30        | 21.89  | 22.44  | 22.79  | 22.90          | 23.16  |
| Poultry, Eggs                         | 17.99  | 18.09  | 19,26  | 20.38  | 20.74  | 21.48        | 22.60  | 23.73  | 24.27  | 25.01          | 26.12  |
| Broilers                              | 11.13  | 11.24  | 11.96  | 12.81  | 13.05  | 13.68        | 14.63  | 15.40  | 15.76  | 16.36          | 17.17  |
| Turkeys                               | 2.64   | 2.70   | 2.81   | 2.92   | 2.93   | 3.05         | 3.16   | 3.31   | 3.34   | 3.43           | 3.56   |
| Chicken Eggs                          | 3.62   | 3.54   | 3.84   | 3,97   | 4.07   | 4.03         | 4.05   | 4.22   | 4.35   | 4.39           | 4,52   |
| Other Poultry                         | 0.60   | 0.60   | 0.64   | 0.68   | 0.69   | 0.72         | 0.75   | 0.79   | 0.81   | 0.83           | 0.87   |
| Other Livestock**                     | 2.69   | 2.73   | 2.77   | 2.81   | 2.84   | 2.90         | 2.98   | 3.08   | 3.18   | 3.27           | 3,36   |
| Government Payments                   | 7.90   | 9.09   | 7.73   | 8.51   | 8.51   | 7.94         | 7.44   | 6.89   | 6.35   | 5.92           | 4.86   |
| Total Cash Receipts                   | 183.91 | 188.22 | 187.16 | 188.41 | 190.24 | 194.66       | 200.93 | 207.18 | 210.22 | 214.16         | 216.85 |

**Cash Receipts from Farming** 

\* Includes tobacco, vegetables and melons, fruits and tree nuts, and other crops. \*\* Includes horses, mules, and aquaculture.

# **U.S. Farm Production Expenses**

- **Production expenses for farm-origin inputs** are projected to decline by \$1.05 billion in 1995. The bulk of the decline occurs in feed expenses as livestock producers see lower corn and soybean meal prices. With an expanding livestock sector and increasing grain prices, feed expenses grow to \$26.04 billion by 2004.
- Manufactured input expenses show steady growth throughout the projection period as input prices and acreage increase. For 1995, fertilizer expenses are projected to increase by \$0.53 billion due to higher fertilizer prices. Increases in fuel prices cause production expenses for fuels and oils to grow from \$5.60 billion in 1995 to \$7.34 billion in 2004.
- As interest rates continue to recover from the low levels of 1992 and 1993, **interest expenses** are projected to increase to \$12.68 billion in 1995 and grow further to \$13.27 billion in 1996. From 1997 to 2002, interest expenses decline as interest rates fall.
- Other operating expenses are projected to show steady growth throughout the projection period. Increases in production coupled with higher wage rates increase expenses of labor, repairs, and custom work. Other operating expenses increase by \$8 billion between 1995 and 2004.
- Other overhead expenses fell by less than 1 percent in 1995 due to marginal declines in capital consumption and rent to nonoperators. Other overhead expenses continue to decline through 1998 as capital consumption expenses decline. After 1998, increasing machinery prices and crop acreage add \$3 billion to capital consumption by 2004.
- Total production expenses are projected to increase to \$162.49 billion in 1995. Fertilizer and interest expenses are the primary contributors to the increase. Production expenses grow to \$184.94 billion by 2004.

|                                       | 1994   | 1995   | 1996   | 1997   | 1998   | 1999         | 2000   | 2001   | 2002   | 2003    | 2004     |
|---------------------------------------|--------|--------|--------|--------|--------|--------------|--------|--------|--------|---------|----------|
|                                       |        |        |        |        | (Bi    | llion Dollar | s)     |        |        |         | <u> </u> |
| Farm-Origin Inputs                    | 42.01  | 40.96  | 41.76  | 41.52  | 41.93  | 43.01        | 43.91  | 45.24  | 46.31  | 46.83   | 47.35    |
| Feed                                  | 22.85  | 21.97  | 22.93  | 23.23  | 23.31  | 23.63        | 23.66  | 24.12  | 24.67  | 25.09   | 26.04    |
| Purchased Livestock                   | 13.82  | 13.71  | 13.40  | 12.75  | 12.99  | 13.60        | 14.30  | 15.07  | 15.42  | 15.42   | 14.86    |
| Seed                                  | 5.34   | 5.27   | 5.44   | 5.54   | 5.62   | 5.78         | 5.96   | 6.06   | 6.22   | 6.32    | 6.44     |
| Manufactured Inputs                   | 23.70  | 24.69  | 24.95  | 25.22  | 25.62  | 26.19        | 26.88  | 27.42  | 28.15  | 28.76   | 29.45    |
| Fertilizer, Lime                      | 8.54   | 9.07   | 8.98   | 8.92   | 9.01   | 9.20         | 9.44   | 9,60   | 9.83   | 9.99    | 10.19    |
| Petroleum Fuel, Oils                  | 5.49   | 5.60   | 5.73   | 5.88   | 6.02   | 6.23         | 6.45   | 6.64   | 6.87   | 7.09    | 7.34     |
| Electricity                           | 2.66   | 2.75   | 2.80   | 2.85   | 2.90   | 2.94         | 2.98   | 3.04   | 3.11   | 3.19    | 3.29     |
| Pesticides                            | 7.01   | 7.26   | 7.44   | 7.57   | 7.68   | 7.82         | 8.01   | 8.15   | 8.34   | 8.48    | 8.64     |
| Interest Charges                      | 11.13  | 12.68  | 13.27  | 13.08  | 12.87  | 12.53        | 12.08  | 11.77  | 11.93  | 12.07   | 12.33    |
| Short-Term Interest                   | 5.44   | 6.37   | 6.65   | 6.57   | 6.51   | 6.34         | 6.13   | 6.00   | 6.09   | 6.20    | 6.36     |
| Real Estate Interest                  | 5.69   | 6.31   | 6.62   | 6.51   | 6.36   | 6.19         | 5.95   | 5.77   | 5.84   | 5.87    | 5.98     |
| Other Operating Expenses              | 49.08  | 49.16  | 50.32  | 50.87  | 51.39  | 52.19        | 53.13  | 54.02  | 55.19  | 56:17   | 57.29    |
| Repair, Operation                     |        |        | 0 70   |        |        |              |        |        | 40.70  | 414 0.0 |          |
| of Capital Items                      | 9.31   | 9.36   | 9.76   | 9.90   | 9.98   | 10.13        | 10.33  | 10.52  | 10.79  | 11.02   | 11.28    |
| Contract, Hired Labor<br>Machine Hire | 15.91  | 15.97  | 16.15  | 16.31  | 16.47  | 16.68        | 16.93  | 17.18  | 17.49  | 17.77   | 18.09    |
| Custom Work                           | 4.54   | 4.51   | 4.61   | 4.69   | 4.76   | 4.88         | 5.03   | 5.15   | 5.29   | 5.42    | 5.56     |
| Marketing, Storage.                   |        | •      |        |        |        |              |        |        |        |         |          |
| and Transportation                    | 6.98   | 6.66   | 6.79   | 6.84   | 6.85   | 6.96         | 7.12   | 7.24   | 7.43   | 7.54    | 7.69     |
| Miscellaneous                         | 12.35  | 12.66  | 13.01  | 13.14  | 13.33  | 13.52        | 13.73  | 13.94  | .14.18 | 14.42   | 14.67    |
| Other Overhead Expenses               | 35.21  | 35.00  | 34.51  | 33.82  | 33.65  | 34.22        | 35.00  | 35.79  | 36.56  | 37.44   | 38.52    |
| Capital Consumption                   | 18.67  | 18.52  | 17.89  | 17.24  | 16.89  | 17.27        | 17.75  | 18.23  | 18.72  | 19,25   | 19.79    |
| Property Taxes                        | 6.54   | 6.69   | 6.81   | 6.89   | 6.94   | 7.00         | 7.08   | 7.16   | 7.30   | 7.44    | 7.62     |
| Rent to Non-Operators                 | 10.00  | 9.78   | 9.81   | 9.69   | 9.82   | 9.96         | 10.17  | 10.40  | 10.53  | 10.76   | 11.11    |
| Production Expenses                   | 161.12 | 162.49 | 164.81 | 164.51 | 165.45 | 168.13       | 171.00 | 174.24 | 178.14 | 181.28  | 184.94   |
| Cash*                                 | 143.26 | 144.76 | 147.72 | 148.08 | 149.36 | 151.67       | 154.05 | 156.81 | 160.21 | 162.83  | 165.95   |
| Cost of Op. Dwelling                  | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90         | 1.90   | 1.90   | 1.90   | 1.90    | 1.90     |
| Excluding Op. Dwelling                | 141.36 | 142.86 | 145.82 | 146.18 | 147.46 | 149.77       | 152.15 | 154.91 | 158.31 | 160.93  | 164.05   |
| Noncash*                              | 17.87  | 17.72  | 17.09  | 16.44  | 16.09  | 16.47        | 16.95  | 17.43  | 17.92  | 18.45   | 18.99    |
| Capital Consumption<br>Perquisites to | 18.67  | 18.52  | 17.89  | 17.24  | 16.89  | 17.27        | 17.75  | 18.23  | 18.72  | 19.25   | 19.79    |
| Hired Labor<br>Capital Cons. Rent     | 0.55   | 0.55   | 0.55   | 0.55   | 0.55   | 0.55         | 0.55   | 0.55   | 0.55   | 0.55    | 0.55     |
| to Non-Op. Landlords                  | -1.35  | -1.35  | -1.35  | -1.35  | -1.35  | -1.35        | -1.35  | -1.35  | -1.35  | -1.35   | -1.35    |

### Farm Production Expenses

\* Includes cost of operator dwelling.

### **U.S. Net Farm Income**

- Gross cash income is expected to increase by approximately \$4.5 billion in 1995 to \$196.36 billion. The growth comes from a \$3.5 billion increase in crop receipts and a \$1.2 billion increase in government payments. After remaining relatively stable through 1997, gross cash income increases thereafter as growth in crop and livestock receipts more than offsets declines in government payments.
- The record corn and soybean crops of 1994/95 pushed the value of inventory change up to \$5.35 billion in 1994. Lower production levels for corn and soybeans in 1995 are expected to lower the inventory change to -\$1.15 billion. With the exception of 1998, the value of inventory change remains slightly positive throughout the projection period.
- On a cash basis, net income is expected to increase to \$53.50 billion in 1995. Increased cash expenses and declining government payments result in a \$3.86 billion decline in **net cash income** in 1996. Net cash income increases by \$10 billion from 1998 to 2001, in large part due to gains in livestock receipts.
- Accounting for the value of inventory change, nonmoney income, and total expenses, **net farm income** is projected to fall to \$41.06 billion in 1995. **Realized net farm income**, which excludes the value of inventory change, is projected at \$42.21 billion for 1995. Net farm income reaches its expected low over the projection period in 1996 as gross cash income falls and production expenses increase.

|  | 1994   | 1995   | 1996   | 1997   | 1998   | 1999         | 2000   | 2001   | 2002   | 2003   | 2004   |
|--|--------|--------|--------|--------|--------|--------------|--------|--------|--------|--------|--------|
| ·  |        |        |        |        | (Bil   | lion Dollars | 3)     |        |        |        |        |
| 1. Farm Receipts                         | 184.05 | 187.28 | 187.73 | 188.34 | 190.30 | 195.48       | 202.46 | 209.43 | 213.22 | 217.77 | 221.74 |
| Crops                                    | 88.64  | 92.08  | 90.82  | 91.75  | 92.53  | 94.43        | 96.71  | 99.33  | 101.67 | 104.07 | 107.18 |
| Livestock                                | 87.37  | 87.05  | 88.61  | 88.15  | 89.20  | 92.30        | 96.79  | 100.96 | 102.19 | 104.16 | 104.81 |
| Farm-Related*                            | 8.03   | 8.14   | 8.29   | 8.43   | 8.57   | 8.75         | 8.96   | 9.14   | 9.35   | 9.54   | 9.75   |
| 2. Government Payments                   | 7.90   | 9.09   | 7.73   | 8.51   | 8.51   | 7.94         | 7.44   | 6.89   | 6.35   | 5.92   | 4.86   |
| 3. Gross Cash Income<br>(1 + 2)          | 191.95 | 196.36 | 195.46 | 196.85 | 198.80 | 203.41       | 209.90 | 216.32 | 219.57 | 223.69 | 226.60 |
| 4. Nonmoney Income                       | 8.06   | 8.33   | 8.61   | 8.69   | 8.83   | 9.04         | 9.27   | 9.52   | 9.65   | 9.82   | 9.94   |
| 5. Value of Inventory<br>Change          | 5.35   | -1.15  | 1.52   | 0.52   | -0.06  | 0.08         | 0.42   | 0.45   | 0.95   | 0.97   | 0.85   |
| 6. Gross Farm Income<br>(3 + 4 + 5)      | 205.36 | 203.55 | 205.59 | 206.05 | 207.57 | 212.53       | 219.58 | 226.29 | 230.17 | 234.49 | 237.39 |
| 7. Cash Expenses**                       | 141.36 | 142.86 | 145.82 | 146.18 | 147.46 | 149.77       | 152.15 | 154.91 | 158.31 | 160.93 | 164.05 |
| 8. Total Expenses                        | 161.12 | 162.49 | 164.81 | 164.51 | 165.45 | 168.13       | 171.00 | 174.24 | 178.14 | 181.28 | 184.94 |
| 9. Net Cash Income<br>(3 - 7)            | 50.59  | 53.50  | 49.64  | 50.67  | 51.34  | 53.64        | 57.74  | 61.41  | 61.25  | 62.76  | 62.55  |
| 10. Realized Net Farm Inc<br>(3 + 4 - 8) | 38.88  | 42.21  | 39.26  | 41.02  | 42.18  | 44.32        | 48.16  | 51.60  | 51.08  | 52.24  | 51.60  |
| 11. Net Farm Income                      | 44.24  | 41.06  | 40.78  | 41.54  | 42.12  | 44.40        | 48.58  | 52.05  | 52.03  | 53.21  | 52.45  |
| Deflated (1987 \$)***                    | 35.10  | 31.65  | 30.53  | 30.23  | 29.80  | 30.44        | 32.25  | 33.48  | 32.45  | 32.17  | 30.75  |

#### **Farm Income Statistics**

\* Income from machine hire, custom work, sales of forest products, and other miscellaneous cash sources.
\*\* Excludes capital consumption, perquisites to hired labor, and farm household expenses.
\*\*\* Deflated by the GNP price deflator, 1987=1.