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GRAINS AND OILSEEDS OUTLOOK FOR 2002¹

Prepared By Members Of The
Wheat, Feed Grains, and Oilseeds Interagency Commodity Estimates Committees
U.S. Department of Agriculture

Introduction

Bob Riemenschneider will only present the International Grains and Oilseeds Outlooks for 2002/03 at the Grains and Oilseeds session. This paper provides the domestic supply, use, and price projections for 2002/03 for wheat, corn, and soybeans and products. The first official USDA supply and use projections will not be published until May 10, when the National Agricultural Statistics Service publishes the first forecast of winter wheat production. While material in Bob's speech provides much of the background for the trade projections in this paper, the other "projections" are based on the Winter Wheat Seeding report and analyses by members of the Interagency Estimates Committees for Wheat, Feed Grains, and Oilseeds.

There are numerous differences between the projections in this paper and those for 2002/03 in the Baseline, partially because the Baseline was done last October. However, one major difference is the analyses in this paper are based on an assumption that loan rates for 2002/03 are the same as for 2001/02. This change is based on a belief that most farmers and commodity analysts expect unchanged loan rates for 2002/03, and the change will allow readers to more readily compare USDA projections with those from other sources.

Corn prices in 2002/03 are projected up around a dime from this year as expanding industrial use and exports more than offset the larger production. Larger wheat and soybeans crops are also expected, with expanding use almost offsetting the larger soybean production. Wheat, however, will face even greater competition in the export market than this year and prices are projected down a nickel from the midpoint of the forecast price range for 2001/02.

Planted Acreage Outlook for 2002 (Table 1)

The outlook for 2002 features a marked increase in corn area, while soybeans and wheat plantings stay relatively stable. Reflecting the increase in corn, combined plantings of the three major field crops are forecast to rise moderately from 2001. Normal weather is assumed and this should lead to a reduction in prevented plantings from 2001, when adverse conditions disrupted planting in several areas. Market prospects for each crop are not dramatically different from a year ago, but the input situation is notably calmer. Variable costs of production are projected to decline in 2002, especially for corn. This analysis assumes that loan rates will continue at the same level as 2001. (The loan rates for 2002 have

¹This paper incorporates contributions by analysts from the World Agricultural Outlook Board, the Economic Research Service, the Foreign Agricultural Service, and the Farm Service Agency.

not yet been announced.)

Wheat plantings are forecast at 59.5 million acres, down slightly from the previous year. The estimate of winter wheat area was released in January and was down fractionally at 41 million acres, with hard red winter area up and soft red winter down. Likewise, little change is expected for spring wheat area in 2002, with a small increase in durum area slightly outweighed by a drop in other spring wheat acres.

Even though global and U.S. stocks have been declining, wheat prices have risen only modestly. Average farm prices have failed to advance past the \$3.00 threshold. In most areas, returns for spring wheat will not provide incentives to expand plantings, although there could be an expansion in some areas due to plantings on land where the winter wheat crop is abandoned. Durum prospects are somewhat better than most other classes of wheat as a result of shortfall in 2001 production in Canada and the United States. This has increased prices of milling quality durum and should promote increased plantings. Spring wheat will continue to face strong competition from oilseeds for acres in 2002, and greater competition from barley in some areas, given tight supplies of malting barley in the U.S. and Canada.

Corn planted area is forecast at 78.5 million acres in 2002. This is up nearly 3 million acres from 2001, when acreage fell to its lowest point since 1995 (when there was still a set-aside program). Farmers backed off corn in 2001 as they confronted soaring prices and questionable availability of nitrogen, along with high fuel prices, including sharp increases in irrigation pumping costs due to the spike in natural gas prices. Unfavorable weather in several areas, including Iowa, Minnesota, Wisconsin, Missouri, and Texas, further constrained planting. The energy and fertilizer situation has reversed itself in 2002, with much lower prices and plentiful supplies, boosting corn prospects sharply.

Another factor underlying the forecast for higher corn plantings is expectations of favorable returns based on productivity gains, market prices, and government payments. Despite less than ideal weather, average yields in 2001 were the second highest on record. Corn prices for the old crop are up only modestly to date, but returns have been bolstered by loan deficiency payments (LDPs), averaging 15 cents per bushel and received on 70 percent of the crop by mid-February. Many farmers in the Delta and Southeast had excellent corn crops in 2001 and they are expected to increase corn area in 2002, given indications that cotton area will be reduced.

Soybean plantings are forecast at 74.5 million acres, up slightly from 2001. The question of when the soybean expansion would finally plateau may have been answered following recent acreage revisions for the 2001 crop. The final acreage estimate for 2001 showed a year-to-year decline for the first time since 1990. The soybean acreage outlook is relatively stable because of its continued importance in crop rotations, heavy reliance on herbicide-resistant soybeans in weed control programs, and the value of marketing loan benefits. Although soybean prices are forecast to remain weak in 2002, nearly all growers will rely on LDPs that should remain large. For the 2001 soybean crop, LDPs to date are averaging \$1.24 per bushel on close to 90 percent of production.

There are several other factors that will also influence planting. In the Midwest, there are some indicators pointing to a slippage in soybeans planting in areas where 2001 soybean yields were disappointing or where there are concerns about disease or pest problems. Some growers are adjusting their rotations to include two consecutive crops of corn. On the other hand, some land where soybean

planting was prevented in 2001 should come back. Soybeans will continue to gain in northern states where more improved varieties, including those with herbicide-resistant traits, are becoming available. Finally, some of the drop in 2002 cotton acreage will likely go into soybeans as well as corn.

Table 1. Wheat, Corn, and Soybean Planted Acreage, 1996-2002F (million acres)

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002F |
|----------|-------|-------|-------|-------|-------|-------|-------|
| Wheat | 75.1 | 70.4 | 65.8 | 62.7 | 62.6 | 59.6 | 59.5 |
| Corn | 79.2 | 79.5 | 80.2 | 77.4 | 79.6 | 75.8 | 78.5 |
| Soybeans | 64.2 | 70.0 | 72.0 | 73.7 | 74.3 | 74.1 | 74.5 |
| Total | 218.5 | 219.9 | 218.0 | 213.8 | 216.4 | 209.5 | 212.5 |

F = Forecast

Source: National Agriculture Statistics Service

Wheat Supply, Demand, and Price Outlook for 2002/03 (Table 2)

Wheat Supplies: While there remain many questions about the number of spring wheat acres, especially durum, there also is considerable uncertainty about harvested acres of winter wheat. Table 3 shows a forecast harvested area of 49.6 million, up almost 1 million from the 2001 crop. However, 2001 harvested acres were the lowest since 1972. The harvested area in 2002 is projected using a 3-year average harvested-to-planted ratio by State. Many analysts believe much of the 800,000-acre increase for Texas shown in the Winter Wheat Seeding report will be hayed and grazed instead of harvested for grain. Dry areas in parts of the Plains States could result in reduced harvested to planted ratios. Assuming an average wheat yield of 41.3 bushels per acre, based on the average of 1999-2001 yields by State, results in production of 2,050 million bushels, up 92 million from 2001. The higher production will be more than offset by reduced carryin stocks, leaving 2002/03 supplies down a little more than 100 million bushels from a year earlier.

Wheat Domestic Demand: Food use will likely increase about 1 percent. This change is commensurate with population growth and the average annual percentage change in food use since 1990. Feed and residual, at 225 million bushels, is unchanged from 2001/02.

Wheat Export Demand: U.S. exports in 2002/03 are expected to fall to, or slightly, below the 909 million bushels in 1985/86. The U.S. will face increased competition from expanding production in the major foreign exporters, especially the EU, and continued strong competition from exports from Russia, Ukraine, and Eastern Europe.

Wheat Ending Stocks and Market Prices: Total use in 2002/03 is expected to drop 4 percent, but supplies are down more, so ending stocks, at 653 million bushels, are the lowest since 1996/97. However, even with the lower stocks, prices are projected down 5 cents from the midpoint of the price range for 2001/02 to \$2.75 per bushel, due to the expected poor export showing.

The crucial question for the U.S. wheat market price outlook is “how much will China buy ?”

Corn Supply, Demand, and Price Outlook for 2002/03 (Table 3)

Corn Supplies: Corn harvested acreage for grain is forecast at 71.5 million acres based on the average harvested-to-planted ratio for crop years 1999, 2000, and 2001. The trend yield of 137.9 bushels per acre is based on a simple linear trend fit over crop years 1960-2001 and is below last year's yield of 138.2 and the 1994 record of 138.6. Thus, corn production is forecast at 9,860 million bushels, up more than 350 million from 2001. However, reduced carryin stocks will be offsetting and total supplies are projected at 11,416 million bushels, unchanged from 2001/02.

The number one issue for corn in 2002 is how much will corn acres expand. There are some that are saying that factors such as lower fertilizer and fuel prices, growers unhappy with soybean yields, and producers switching from cotton to corn in parts of the Delta and Southeast, could push corn acres above 80 million acres. Also, some analysts are forecasting yields of 140 bushels per acre or more. Corn prices would be much lower if acres and yields expand this sharply.

Corn Domestic Demand: Forecast corn feed and residual use is up 25 million bushels in 2001/02 compared with 2000/01. Pork producers are increasing the number of sows farrowing and feed use may be stronger. The dairy sector is forecast to keep milk production about the same through 2001, then increase slightly in 2002, thus, keeping feed demand strong. Similarly, the poultry sector is also expected to increase production during the period, keeping feed needs strong. Beef production is forecast to slip 4 percent in 2001 and 2 percent in 2002. Thus, their feed needs may not be as strong.

Feed and Residual Use To Drop In 2002/03

Corn feed and residual use in 2002/03 is projected down 100 million bushels from this year, although sorghum use will increase slightly due to higher production. The dairy sector is projected to increase milk production slightly in 2003, following a 2-percent gain in 2002. Similarly, the pork and poultry sectors are expected to increase production 1 to 2 percent in 2003. Cattle feeding, however, is projected to drop in 2003, pulling down total feed needs.

Food, Seed, and Industrial Use of Corn To Increase

Food, seed, and industrial (FSI) use of corn in 2001/02 is forecast up 4 percent from the 2.0 billion bushels used in 2000/01. While most uses of corn are expected to increase somewhat, ethanol is up 10 percent. For 2002/03, FSI use is expected to increase 10 percent from the 2001/02 level, with corn used for ethanol production up almost 30 percent. Incentives in the Industrial Use program will continue to help boost corn used in alcohol production, probably near plant capacities. In addition, a January 2003 switch from methyl tertiary butyl ether (MTBE) to ethanol in California is expected to sharply boost demand for ethanol. Ethanol producers are expanding existing facilities and building new plants. California refineries are modifying their facilities to be able to switch oxygenates. Corn used to make high fructose corn syrup (HFCS) in 2002/03 is projected to show little change, following a 2-percent gain this year. Corn to produce glucose and dextrose in 2001/02 is expected to about equal

last year and grow slightly in 2002/03. Projected use of corn in starch production in 2002/03 is up 2 percent, following a 1-percent gain in 2001/02. Beverage and manufacturing alcohol use of corn is expected to grow about 1 percent in 2001/02 but remain unchanged in 2002/03. Corn used in cereals and other products are forecast to grow about 1 percent, near the rate of population increase.

Corn Export Demand: The global setting for feed grain trade in 2002/03 is more favorable than for wheat, but U.S. corn exports will continue to face strong competition from East European and South American corn and feed wheat from India, China, and the Black Sea region. Thus, only a small increase in U.S. corn exports is expected in 2002/03. Exports are projected at 2,000 million bushels, up 25 million from the 2001/02 forecast.

Corn Ending Stocks and Market Prices: Ending stocks are projected at 1,416 million bushels, a drawdown of 130 million bushels from the forecast 2001/02 level. The ending stocks-to-use ratio of 14.2 percent is below the 2001/02 estimate of 15.7. Thus, market prices are expected to average about \$2.10 per bushel, up from the \$2.00 midpoint in 2001/02.

Soybean Supply, Demand, and Price Outlook for 2002/03 (Table 4)

Soybean Supplies: Soybean production for 2002/03 is projected at a record 2,920 million bushels, up 1 percent from 2001/02. This is based on small increases in both area and yield from last year. Harvested area is projected at 73.5 million acres, up 0.5 million from 2001. The 2002 soybean yield is projected at 39.7 bushels per acre, 0.1 bushels higher than the 2001 reported yield of 39.6 bushels per acre. The projection is based on a regional trend analysis of yields for 1978-2001, which captures the impact of acreage expansion to areas outside the higher-yielding Corn Belt states that has occurred since the mid-1990's. This trend is consistent with recent yields that have increased more slowly than during the 1980's and early 1990's when shifts to narrow rows boosted yields. The trend toward narrower rows reversed in 2001 as producers began switching from 7- and 8-inch drilled rows to 15-inch planted rows to improve air circulation and reduce disease-related losses that may have slowed yield growth in recent years. Some of the decline in the rate of yield growth during the late 1990's also may have resulted from lower yields in early Roundup Ready varieties.

The larger crop and increased carryin stocks are expected to push soybean supplies for 2002/03 to a record 3.2 billion bushels, up 2 percent from last year. This would be the 7th consecutive year-to-year increase in U.S. soybean supplies.

Soybean Domestic Demand: Soybean crush is expected to increase to 1.71 billion bushels in 2002/03, up 30 million bushels from 2001/02. Domestic consumption of soybean meal is projected to increase at around 2 percent based on growth in poultry and hog production. However, U.S. soybean meal exports are likely to increase only slightly to 8 million short tons as foreign sunflowerseed and rapeseed production will recover from relatively poor 2001 harvests and record 2001/02 South American soybean crops will provide increased competition.

Soybean Export Demand: Soybean exports for 2002/03 are projected at 1.02 billion bushels, unchanged from this year's record level. Opportunities for increased U.S. exports will be limited in 2002/03 as

foreign import demand growth slows from recent levels. The rapid expansion of China's imports over the past two years is over for now, increasing competition for other markets. Prospects for the second half of the marketing year will hinge in part on the outlook for 2002/03 production in South America.

Soybean Ending Stocks and Market Prices: Ending stocks for 2002/03 are projected at 295 million bushels, an increase of 25 million bushels from the forecast 2001/02 level. Market prices are expected to average about \$4.25 per bushel, down 5 cents from midpoint in 2001/02. However, the marketing loan program will continue to support producers' incomes with LDP rates exceeding \$1.00 per bushel.

Soybean Oil: U.S. soybean oil stocks are projected to decline modestly in 2002/03. Lower beginning stocks will partially offset increased production, leaving total supplies only slightly higher than in 2001/02. Domestic use is expected to increase about 2 percent, but total use is will increase only 1 percent as soybean oil exports are projected to decline. U.S. soybean oil exports will face competition from increased sunflowerseed and rapeseed production and the record large South American soybean production. In addition, global palm oil supplies remain relatively large as Malaysian production has remained strong. Although soybean oil prices are projected at 16 cents per pound in 2002/03, global import demand growth will slow as consumption in the Middle East and North Africa declines because of increased availabilities of other oils, and consumption in India shows little growth.

Table 2. Wheat: Supply, Demand, and Price, 2000/01-2002/03

| | 2000/01 | 2001/02 | 2002/03 |
|---|---------|----------|----------|
| | | 1/ 2/ | 2/ 3/ |
| Area planted (mil. acres) | 62.6 | 59.6 | 59.5 |
| Area harvested | 53.1 | 48.7 | 49.6 |
| Yield (bu./acre) | 42.0 | 40.2 | 41.3 |
| Production (mil. bushels) | 2,232 | 1,958 | 2,050 |
| Beginning Stocks | 950 | 950 | 671 |
| Imports | 90 | 95 | 100 |
| Supply | 3,272 | 2,929 | 2,821 |
| Feed and residual | 298 | 225 | 225 |
| Food, seed, & industrial | 1,037 | 1,033 | 1,043 |
| Total Domestic Use | 1,335 | 1,258 | 1,268 |
| Exports | 1,061 | 1,000 | 900 |
| Total Use | 2,396 | 2,258 | 2,168 |
| Ending Stocks | 876 | 671 | 653 |
| Farm Price (\$/bushel) | 2.62 | 2.80 | 2.75 |
| | | 3/ | |
| 1/ Forecast. 2/ Projected. 3/ Mid-point of forecast range | | | |

Table 3. Corn: Supply, Demand, and Price, 2000/01-2002/03

| | 2000/01 | 2001/02 1/ | 2002/03 2/ |
|---------------------------|---------|---------------|---------------|
| Area planted (mil. acres) | 79.6 | 75.8 | 78.5 |
| Area harvested | 72.4 | 68.8 | 71.5 |
| Yield (bu./acre) | 136.9 | 138.2 | 137.9 |
| Production (mil. bushels) | 9,915 | 9,506 | 9,860 |
| Beginning Stocks | 1,718 | 1,899 | 1,546 |
| Imports | 7 | 10 | 10 |
| Supply | 11,639 | 11,416 | 11,416 |
| Feed and residual | 5,838 | 5,850 | 5,750 |
| Food, seed, & industrial | 1,967 | 2,045 | 2,250 |
| Total Domestic Use | 7,805 | 7,895 | 8,000 |
| Exports | 1,935 | 1,975 | 2,000 |
| Total Use | 9,740 | 9,870 | 10,000 |
| Ending Stocks | 1,899 | 1, | 1,416 |
| Farm Price (\$/bushel) | 1.85 | 1.80 3/ | 2.10 |

1/ Forecast. 2/ Projected. 3/ Mid-point of forecast range.

Table 4. Soybeans: Supply, Demand, and Price, 2000/01-2002/03

| | 2000/01 | 2001/02 1/ | 2002/03 2/ |
|---------------------------|---------|---------------|---------------|
| Area planted (mil. acres) | 74.3 | 74.1 | 74.5 |
| Area harvested | 72.4 | 73.0 | 73.5 |
| Yield (bu./acre) | 38.1 | 39.6 | 39.7 |
| Production (mil. bushels) | 2,758 | 2,891 | 2,920 |
| Beginning Stocks | 290 | 248 | 270 |
| Imports | 4 | 5 | 6 |
| Supply | 3,052 | 3,143 | 3,196 |
| Crush | 1,641 | 1,680 | 1,710 |
| Seed, & residual | 164 | 174 | 171 |
| Total Domestic Use | 1,805 | 1,854 | 1,881 |
| Exports | 1,000 | 1,020 | 1,020 |
| Total Use | 2,804 | 2,873 | 2,901 |
| Ending Stocks | 248 | 270 | 295 |
| Farm Price (\$/bushel) | 4.54 | 4.30 3/ | 4.25 |

1/ Forecast. 2/ Projected. 3/ Mid-point of forecast range.

Table 5. Soybean Meal: Supply, Demand, and Price, 2000/01-2002/03

| | 2000/01 | 2001/02 | 2002/03 |
|--|---------------------|---------|---------|
| | | 1/ | 2/ |
| | Thousand short tons | | |
| Beginning Stocks | 293 | 383 | 275 |
| Production | 39,389 | 40,092 | 40,860 |
| Imports | 51 | 50 | 65 |
| Supply | 39,733 | 40,525 | 41,200 |
| Domestic Use | 31,687 | 32,350 | 32,950 |
| Exports | 7,662 | 7,900 | 8,000 |
| Total Use | 39,349 | 40,250 | 40,950 |
| Ending Stocks | 383 | 275 | 250 |
| Avg. Meal Price (\$/ton) | 173.60 | 157.5 | 155.00 |
| | | 3/ | |
| 1/ Forecast. 2/ Projected. 3/ Mid-point of forecast range. | | | |

Table 6. Soybean Oil: Supply, Demand, and Price, 2000/01-2002/03

| | 2000/01 | 2001/02 | 2002/03 |
|--|----------------|---------|---------|
| | | 1/ | 2/ |
| | Million pounds | | |
| Beginning Stocks | 1,995 | 2,877 | 2,535 |
| Production | 18,434 | 18,730 | 19,210 |
| Imports | 73 | 78 | 85 |
| Supply | 20,502 | 21,685 | 21,830 |
| Domestic Use | 16,219 | 16,750 | 17,100 |
| Exports | 1,406 | 2,400 | 2,300 |
| Total Use | 17,625 | 19,150 | 19,400 |
| Ending Stocks | 2,877 | 2,535 | 2,430 |
| Avg. Oil Price (\$/lb.) | 0.142 | 0.153 | 0.160 |
| | | 3/ | |
| 1/ Forecast. 2/ Projected. 3/ Mid-point of forecast range. | | | |