

Agricultural Outlook Forum 1999

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GRAINS AND OILSEEDS OUTLOOK FOR 1999

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The early outlook for grains and oilseeds in 1999 is marked by the continuation of large supplies and low prices. While the details vary from commodity to commodity, demand prospects in the domestic market are favorable, while the export picture is generally more mixed. Further gains in soybean supply are projected to outstrip increase in use, and prices across the soybean complex will fall. Corn stocks and prices are projected to be steady while wheat stocks decline and prices rise moderately.

Outside of the United States and Western Europe, economic growth in much of the world has been poor in the last few months, and in many cases, negative. The outlook for 1999 calls for small improvements in many of the problem areas such as Southeast Asia, but serious problems will persist in the former Soviet Union and other countries such as Brazil. Obviously, this will be a source of continued uncertainty.

While U.S. grain exports have been weak recently, the domestic market for grain has been strong. This buoyant market has been characterized by fairly steady growth over many years, but this solid performance is often overlooked in the concern about exports. In 1999, domestic consumption is projected to rise again for the grains and soybeans.

Several difficult questions that will be discussed at this conference have an important bearing on the outlook. How will farmers react to low prices in planting decisions, both in the United States and overseas? How fast will key countries recover from economic and financial difficulties? Will low prices spur greater purchases by users abroad, or will low income growth outweigh the attraction of low prices? None of these can be answered with certainty. In addition to facing the usual concerns about weather as planting season approaches, U.S. producers will be challenged by another tough year in the market.

The Low Price Environment: How Did We Get Here?

To better understanding the weak price outlook, a brief look back might be helpful before looking ahead. The Asian financial crisis and subsequent economic problems in many other countries have contributed to weak commodity prices, but the roots go back further. In 1995, record high prices provided strong incentives to grain producers to expand production, and they did, both in the United States and abroad. In 1996, global production of wheat increased 44 million tons to a new record, reflecting higher acreage and good yields, and then it rose a further 27 million tons in 1997. Similarly, global coarse grain output soared in 1996, jumping more

than 100 million tons to a record high, although production then slipped in 1997.

Oilseeds experienced a similar supply response triggered by high prices, although lagged by a year. Led by gains in soybeans, global oilseed production in 1997 increased 24 million tons to a record high. Again, there was a striking increase in area, and favorable weather boosted yields. This was followed by a smaller production increase in 1998.

Against this backdrop, world trade in coarse grains declined in 1997/98, and is only increasing modestly in 1998/99. Although the volume of world wheat trade held up in 1997/98, it is down sharply in 1998/99, and is forecast to be the lowest since the mid-1980's. However, even before world imports began to falter, U.S. grain exports started to weaken in 1996/97 as the United States lost market share in the face of strong competition from other suppliers. U.S. exports and market share for corn has increased in 1998/99, but it remains relatively low by historical standards. For wheat, the volume of U.S. exports and market share has improved only marginally.

Oilseeds trade has been stronger and this helps explain why soybean prices have showed more strength relative to the grains despite large supplies. World trade in the major oilseeds was record high in 1997/98, and has remained strong in 1998/99, even though the volume of soybean trade will decline. Global trade in the major protein meals, including soybean meal, has increased for the last several years, and will be record large again in 1998/99. Likewise, vegetable oil trade, including soybean oil, is also expected to be record high in 1998/99, although its rate of growth has slowed. U.S. exports of soybeans and products have been comparatively strong, even with some loss of market share to South America. However, in 1998/99, U.S. exports are contracting, largely accounting for recent price weakness.

Changes in many countries account for shifting trade patterns, but China stands out as an important swing factor in global trade. Imports by China have been an important force in driving up trade in both soybeans and soybean meal in recent years. This presents a stark contrast to wheat and corn, where China's imports have shrunk sharply. China was the world's largest wheat importer in 1995/96, taking more than 12 million tons, but its imports have since shrunk to around 2 million tons. In the case of corn, China has switched from a net importer in 1995/96 to a large net exporter. For wheat and corn, very large crops and an apparent slowing of consumption growth have reduced import needs.

U.S. Acreage in 1999: Wheat and Corn to Drop, Soybeans to Increase

U.S. plantings of the major field crops increased sharply in 1996 to the highest level since the early 1980's, but they have declined each year since. In 1999, another decline is likely, given low price expectations. Combined plantings of wheat, corn, and soybeans may drop 4 million acres to 214.5 million. Wheat is expected to decline more than 3 million acres to 62.5 million, with corn expected to fall 1.7 million to 78.5 million. However, soybean plantings are expected to rise about 1 million acres to 73.5 million, another record. These acreage projections are based on early February market conditions, and, except for winter wheat, are not based on producer surveys. The National Agricultural Statistics Service (NASS) will publish USDA's first survey-based planting intentions at the end of March.

Because it is early, changes in market conditions over the next few weeks could lead to considerable shifts from these projections for spring wheat, corn, and soybeans. In some areas, particularly drier areas, more land may be fallowed in 1999. Acreage of the other feed grains (grain sorghum, barley, and oats) is expected to show little change from 1998 and remain near historical lows due to relatively low returns. Cotton plantings are likely to increase in 1999, but the growth will probably be modest. Rice area is also expected to increase, but this will be small and largely confined to the Delta. Despite grower interest in alternative crops, market opportunities for most of these crops will be relatively limited. Acreage for sunflower, canola, and other minor oilseeds has expanded sharply since 1996, and another small increase in plantings is expected this year despite signs of weakening markets for vegetable oils. A small increase in dry edible beans and other pulses is also likely, but this acreage is very small relative to the major crops.

The big acreage story in recent years has been the dramatic expansion in soybeans. In 1998, planted acreage reached a record 72.4 million acres--up 11 million from 1995. This reflects favorable market conditions and greater flexibility under 1996 farm legislation. The end of program provisions under the old legislation that tended to boost corn over soybeans have made soybeans more competitive. Farmers have had good success with the crop in areas that in the past were sometimes considered too dry or having too short a growing season. This success is partly due to favorable weather conditions, such as no early frosts, and varietal improvements. The introduction of herbicide tolerant soybeans such as Roundup Ready has cut production costs for many farmers, adding to soybeans' appeal.

Although soybean market prospects have begun to slip in recent months, many producers will focus on the loan rate in making production decisions for 1999 rather than cash or futures prices. Currently, the national loan rate of \$5.26 per bushel for soybeans is attractive relative to the \$1.89 rate for corn or the \$2.59 rate for wheat. Producers can attain this price through use of marketing loan provisions even if market prices are lower. Thus, although futures prices for soybeans have fallen below \$5.00 per bushel recently, and corn prices have strengthened a bit, an increase in soybean plantings is still expected this spring.

Soybeans are expected to remain very popular in the western and northern fringes of the Corn Belt in 1999. In general, soybeans compete well with corn in areas outside the heart of the Corn Belt. Much of the drop in winter wheat acres, especially for soft red wheat, may go into soybeans. While many producers in the Midwest will tend to stick to corn-soybean rotations, much of the uncertainty lies with producers elsewhere. For example, corn acres are likely to decrease in the south and southeast after drought cut production and led to widespread disease problems in 1998, but it is not clear what the acres will be used for. Assuming only a modest increase in cotton acres, then soybeans will probably be in the running.

The 1999/2000 Crop Outlook

These forecast were updated in early February and may be slightly different from 1999/2000

numbers contained in the long-run baseline projections made in November that are also released at this conference. In most cases, changes reflect adjustments made in the outlook for 1998/99 published in recent *WASDE* reports. However, some adjustments are also due to the recent 5-year revisions in U.S. area, yield, and production.

Most of the initial U.S. agricultural attache forecasts of foreign country supply and use will only become available in the next few weeks. These reports, along with the March *Prospective Plantings* and *Grain Stocks* reports, could alter our projections significantly. USDA will publish its first forecasts of the supply and demand balance sheets in the May *WASDE* report.

Wheat

U.S. wheat production is projected to decline 15 percent in 1999 to 2,175 million bushels, based on declines in acreage and yield. If realized, this would be the lowest crop in 4 years. Based on NASS survey data released in January, winter wheat seedings are estimated at 43.4 million acres, down more than 3 million from 1998 and the lowest since 1972. Spring wheat plantings are projected at 19.1 million acres, down slightly from 1998, but moisture conditions as well as market factors will help shape final planting decisions.

Using a rounded average of the last 3 years gives an average wheat yield of 39.5 bushels per acre, down from the record 43.2 bushels in 1998. Like the acreage question, there is considerable uncertainty when forecasting yield. Identifying a reliable yield trend is difficult. Average U.S. wheat yields essentially flattened out for most of the 1980's and first half of the 1990's, but then spiked up sharply in the last 3 years. It appears that much of this surge reflects favorable growing conditions rather than wholesale genetic improvements or changes in cultural practices. In any case, any significant deviation in 1999 yields will have a big impact on production. A change of 4 bushels from the yield used here with the same acreage would amount to a swing of 220 million bushels.

Carryin stocks of wheat in 1999/2000 will be large, projected at 980 million bushels which would be the highest since 1988/89. Because of this, wheat supply is projected to drop only about 3.5 percent—not as much as the expected fall in production—and still higher than 1997/98. Imports are projected to be unchanged at 95 million bushels.

Demand concerns will be equally or even more vexing than those surrounding wheat supply. Total use is projected to rise 2.5 percent in 1999/2000 based entirely on larger exports. Domestic use is expected to slip because lower anticipated feed and residual use will outweigh smaller gains in food use. Assuming no major quality problems, low corn prices will make wheat less attractive for feeding. The season average farm price of wheat is projected at \$.95 per bushel, up 25 cents from the mid-point of the 1998/99 forecast. Although the ratio of stocks to use will decline, continued weak prices of other commodities will also influence the wheat market.

Another small increase is projected in wheat food use, however. In calendar year 1998, the volume of wheat ground for flour surpassed 900 million bushels for the first time. Over the last decade, growth has averaged 1.9 percent per year as per capita use approaches 150 pounds per

year. The popularity of many new wheat-based products such as tortilla wraps, as well as continued growth in bagels, pizza, and other specialty items, have contributed to the growth.

U.S. wheat exports are projected to rise 12 percent to 1,150 million bushels, including the portion of donations that are not expected to move in the 1998/99 marketing year. Nevertheless, total exports would still be comparatively low, constrained by continued strong export competition and small growth in imports. The U.S. market share is projected to improve slightly but remain below the historical average.

One concern underlying the disappointing level of U.S. wheat exports this year is the weakness in soft red winter wheat (SRW) exports. It has become apparent that SRW is no longer the wheat of choice for some traditional foreign buyers, while China, a very large buyer in the past, has dramatically reduced all wheat imports in recent years. Along with shrinking aid shipments in the 1990's which often featured SRW, recently there has been a reduction in the role of government procurement agencies in several countries. These agencies often bought the least expensive wheat available such as SRW and not necessarily the wheat most preferred by their millers and end-users. With millers now having a greater influence on purchasing decisions, SRW export prospects may continue weak, especially if competing classes of wheat remain cheap.

Corn

Corn production in 1999 is projected at about 9.5 billion bushels, down 3 percent from the year before. This would be the fourth consecutive crop over 9 billion bushels. Planted acres are projected down about 2 percent from 80.2 million in 1998, and the lowest since 1995/96, when there was an acreage reduction program in place. The long-term (1960-98) linear trend gives an average yield of 132 bushels per acre. This would be down 2.4 bushels from 1998, but the third highest ever.

Over most of the 1980's and 1990's, variability in corn production has been quite pronounced, largely due to weather. The last 3 years have been unusual because output has been relatively steady. While normal weather is assumed in these projections, a case of exceptionally good or bad growing conditions could have a big impact, similar to or even greater than the case of wheat discussed earlier.

Because of the lower prospective crop, corn supply in 1999/2000 is projected to increase only 2 percent, the lowest year-to-year increase in several years. Carryin stocks of corn are projected at 1,786 million bushels, the largest since 1993/94. With a gain in use expected to offset the increase in supply, ending stocks will show little or no change. While the stocks-to-use ratio is expected to slip from 1998/99 because of higher use, the farm price of corn is projected unchanged at \$1.95 per bushel. Sharply lower soybean prices will limit corn's upward price potential.

Total corn disappearance is expected to rise 2 percent on 1999/2000 and surpass the record set in 1994/95. The prospective new record reflects a different pattern, however, because exports will be significantly lower than the 2.2 billion bushels shipped in 1994/95, and the domestic market

will account for a greater share of the total. Domestic use is expected to increase nearly 2 percent to 7.7 billion bushels, its third consecutive record, while exports are projected up 4 percent to 1.8 billion.

Feed and residual use of corn, the largest category, is expected to increase 1 percent in 1999/2000, given the increase in supply, low prices, and expectations that supplies of other feed grains and wheat will not increase significantly. Despite some cutbacks in beef cattle and shrinkage in the hog sector, animal inventories will remain very large and poultry expansion will keep total grain consuming animal units close to 1998/99.

Food, seed, and industrial use of corn is projected to increase 3 percent in 1999/2000, led by gains in high fructose corn syrup (HFCS) and ethanol. HFCS has had impressive, sustained growth over many years, tied to use in soft drinks and many processed foods, although use in low fat applications may have peaked. Corn used for ethanol, at a record pace for 1998/99 is expected to increase again as capacity expands. FSI use is expected to exceed exports for the third year in a row, an indication of both FSI's strength and the weakness of exports.

World corn trade in 1999/2000 is likely to rise slightly, largely due to some growth in East Asia and Mexico. However, the United States will continue to face strong competition from foreign exporters, especially Argentina. The outlook calls for higher corn production in Argentina based on improved prices relative to oilseeds. China is expected to maintain large exports, but to increase corn imports in 1999/2000.

Soybeans, Soybean Meal, and Soybean Oil

Soybean production is projected at 2,895 million bushels, up 5 percent from 1998 and the third consecutive record high. This is based on record large plantings for the second straight year, as discussed previously, and an increase in yields. The average soybean yield is projected at 40 bushels per acre, up from 38.9 last year, reflecting the trend over the last decade. The record high was 41.4 bushels, achieved in 1994. Yield growth has accelerated relative to earlier years as more growers adopted narrow row plantings. The popularity of Roundup Ready varieties is mainly seen as yield neutral in the U.S. and is used as a cost reducing strategy.

Record production and the largest carryin stocks in more than 10 years will propel soybean supply above 3 billion bushels for the first time in 1999/2000. Supply is projected at 3,310 million bushels, up 12 percent from the record of 1998/99. Abundant supplies and favorable prices will encourage use, but gains in disappearance are not projected to be big enough to prevent further stock building. Ending stocks are projected at 565 million bushels, the largest ever, surpassing the previous high of 536 million in 1985/86. This is expected to push the price of soybeans prices down to the lowest level in nearly 30 years, with the season average price projected at \$4.35 per bushel.

Low prices will boost consumption prospects and help regain U.S. export market share. After a dip in 1998/99, soybean crush is expected to rebound. Feed requirements for protein feeds will remain very large. Even with the likelihood of some contraction in the hog sector, expansion of broiler production will boost the number of high protein consuming animal units. The amount of

growth in the crush is also tied to international sales of products, and both meal and oil exports are expected to increase in 1999/2000.

Soybean exports are projected at 930 million bushels in 1999/2000, reversing the decline of the last 2 years, and eclipsing the 1996/97 record. Much of the outlook will hinge on how South American producers react to the low prices. Brazil's recent devaluation has raised internal soybean prices, partly cushioning the impact of the global price decline. However, imported inputs such as fertilizer and chemicals will be much costlier while the availability of credit will be a question, along with what rate of interest. Productivity could suffer as well as plantings. An increase in the area of corn, which typically uses fewer inputs in Brazil than soybeans and is less expensive to grow, could reduce soybean area for the next crop, which will not be planted until the fall of 1999.

U.S. soybean oil production is projected to increase after a small decline in 1998/99. Total use is projected to increase, but not as much, leading to some increase in carryout stocks, and further slippage in prices. Domestic use will continue its long-term growth, while exports are projected to partly recover from a decline in 1998/99. After surging because of tight supplies of palm oil and other soft oils such as canola, global vegetable oil markets have begun to cool recently. One factor has been China's greater interest in importing oilseeds (mainly rapeseed) to meet oil needs. Globally, the outlook is for healthy consumption growth, but larger production in 1999 will constrain U.S. oil export prospects. Rapeseed and sunflower oil output is expected to increase in several important producing countries, and palm oil could recover sharply from the El Nino drought of last year in Southeast Asia. However, the extent of the recovery is still far from certain. In any event, because of abundant supplies, soybean oil should be price competitive.

The soybean meal outlook is similar to the rest of the soy complex: increased production and supply, higher domestic disappearance and exports, and falling prices. Meal prices could fall to the lowest level since the early 1970's. These attractive prices will promote domestic use, as well as exports. Nevertheless, global consumption growth could slow from 1998/99, particularly in the EU and other developed market economies as hog inventories drop. In Asia, there are indications that consumption could actually increase in some countries as financial problems ease. China remains a huge uncertainty but is expected to be a larger consumer of protein feeds in 1999/2000 after working through some accumulated stocks. Recent rumors that China will impose a value added tax on soybean meal only adds to the uncertainty, but, if implemented, it could shift the trade mix in favor of soybeans.

Table 1.--Wheat: Supply, Demand, and Price

	1997/98	1998/99	1999/2000
		1/	2/
Area planted (mil. acres)	70.4	65.9	62.5
Area harvested	62.8	59.0	55.0
Yield (bu./acre)	39.5	43.2	39.5
Production (mil. bushels)	2,481	2,550	2,175
Beginning Stocks	444	722	980
Imports	95	95	95
Supply	3,020	3,368	3,250
Feed and residual	248	350	275
Food, seed, & industrial	1,009	1,013	1,024
Total Domestic Use	1,257	1,363	1,299
Exports	1,040	1,025	1,150
Total Use	2,297	2,388	2,449
Ending Stocks	722	980	801
Farm Price (\$/bushel)	\$3.38	\$2.70 3/	\$2.95

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

Table 2.--Corn: Supply, Demand, and Price

	1997/98	1998/99	1999/2000
		1/	2/
Area planted (mil. acres)	79.5	80.2	78.5
Area harvested	72.7	72.6	71.9
Yield (bu./acre)	126.7	134.4	132.0
Production (mil. bushels)	9,207	9,761	9,490
Beginning Stocks	883	1,308	1,786
Imports	9	12	10
Supply	10,099	11,081	11,286
Feed and residual	5,505	5,700	5,775
Food, seed, & industrial	1,782	1,870	1,925
Total Domestic Use	7,287	7,570	7,700
Exports	1,504	1,725	1,800
Total Use	8,791	9,295	9,500
Ending Stocks	1,308	1,786	1,786
Farm Price (\$/bushel)	\$2.43	\$1.95 3/	\$1.95

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

Table 3.--Soybeans: Supply, Demand, and Price

	1997/98	1998/99	1999/2000
		1/	2/
Area planted (mil. acres)	70.0	72.4	73.5
Area harvested	69.1	70.8	72.4
Yield (bu./acre)	38.9	38.9	40.0
Production (mil. bushels)	2,689	2,757	2,895
Beginning Stocks	132	200	410
Imports	5	6	5
Supply	2,826	2,963	3,310
Crush	1,597	1,590	1,660
Seed and residual	158	153	155
Total Domestic Use	1,755	1,743	1,815
Exports	870	810	930
Total Use	2,626	2,553	2,745
Ending Stocks	200	410	565
Farm Price (\$/bushel)	\$6.47	\$5.20 3/	\$4.35

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

Table 4.--Soybean Oil and Meal: Supply, Demand, and Price

	1997/98 1/	1998/99 2/	1999/2000
OIL:			
Beginning Stocks (mil. lbs.)	1,520	1,382	1,365
Production	18,143	18,070	18,725
Imports	60	63	60
Supply	19,724	19,515	20,150
Domestic Use	15,264	15,600	15,800
Exports	3,077	2,550	2,750
Total Use	18,341	18,150	18,550
Ending Stocks	1,382	1,365	1,600
Avg. oil price (cents/lb)	25.8	24.3 3/	23.5
MEAL:			
Beginning Stocks (1000 s. tons)	210	218	275
Production	38,171	37,767	39,376
Imports	55	50	50
Supply	38,436	38,025	39,700
Domestic Use	28,888	29,850	30,550
Exports	9,330	7,900	8,900
Total Use	38,218	37,750	39,450
Ending Stocks	218	275	250
Avg. meal price (\$/ton)	\$185.54	\$137.50 3/	\$117.50

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