AgLetter

RECORD SOYBEAN HARVEST EXPECTED

Two reports released by the U.S. Department of Agriculture (USDA) in September—*Crop Production* and the *World Agricultural Supply and Demand Estimates*—provided a summary of expected grain and oilseed production and use in the U.S. as well as the rest of the world. The reports suggest that U.S. soybean production will reach a new high this fall, while the corn harvest is expected to be about the same as last year. While national production forecasts for corn and soybeans showed little change from the prior month, projections were trimmed somewhat for Seventh Federal Reserve District states.

Nationally, corn production is projected at 9.27 billion bushels, only marginally less than last year. If achieved, it would mark the fourth time (all in this decade) that U.S. farmers produced a crop in excess of 9 billion bushels. In general, the steady production level is the product of a small year-over-year increase in the number of acres harvested and a modest decline in average yields. The number of acres to be harvested is projected at 74 million and is the most since 1985. The national average corn yield is expected to be near 125 bushels per acre, about 2 bushels less than last year. Anecdotal reports indicate, however, that corn (and soybean) yields may be more variable than usual across local geographic areas.

In comparison, the soybean harvest is expected to reach a record level this year, thanks to a combination of relatively high yields and the large number of acres to be harvested. The most recent production estimate of 2.75 billion bushels is 15 percent larger than last year and nearly a tenth greater than the previous high set in 1994. The number of acres harvested is expected to be up by a tenth from last year and is the second largest on record. Furthermore, the average projected yield of 39 bushels per acre—if obtained—is 5 percent larger than last year and is exceeded only by the 41 bushels per acre achieved in 1994. Finally, it should be noted that the corn and soybean harvests are just getting underway in the Midwest, and the yield/production forecasts could move either way as the harvest progresses.

At 2.51 billion bushels, the summer wheat harvest was up a tenth from last year and the largest since 1990. The year-over-year rise in production was spurred by a marginal increase in the number of acres harvested and a large gain in the average yield. The national average yield was estimated to be 39.5 bushels per acre, about a tenth larger than last year and tying the record set in 1990. Winter wheat production—up more than a fourth from the prior year—accounted for all the increase, offsetting a rather sharp decline in spring wheat production.

Mirroring the national trend, this fall's corn harvest in Seventh District states is expected to be similar to last year, with little adjustment in either acres harvested or average yield. But the anticipated year-over-year change among the individual District states is something of a mixed bag. Production levels in Illinois and Iowa are expected to drop 5 percent and 3 percent, respectively, from last year, while the other three states experience

Corn and soybean production estimates

	Yield		Production			
	1996	1997*	1995	1996	1997*	
	(bushels per acre)		(million bushels)			
Corn						
Illinois	136	127	1,130	1,469	1,397	
Indiana	123	122	599	670	714	
Iowa	138	140	1,402	1,718	1,673	
Michigan	94	110	250	216	253	
Wisconsin	111	126	348	333	391	
District states	129.6	129.4	3,729	4,406	4,428	
United States	127.1	125.2	7,374	9,293	9,268	
Soybeans						
Illinois	40	43	378	399	428	
Indiana	38	42	197	204	225	
Iowa	44	49	407	416	510	
Michigan	28	40	60	47	76	
Wisconsin	37	44	34	32	42	
District states	40.4	44.8	1,076	1,098	1,281	
United States	37.6	39.3	2,177	2,382	2,746	

^{*}USDA projection as of September 12. Source: U.S. Department of Agriculture.

gains ranging from 6 percent in Indiana to 17 percent in both Michigan and Wisconsin. Since District corn (and soybean) production is dominated by Illinois and Iowa, the decline in those two states essentially offsets the gains in the other states. Interestingly, the large year-over-year production gains in Michigan and Wisconsin have differing explanations. Wisconsin crop farmers expect to see above-average yields this fall, while farmers in Michigan look for a return to a more normal situation after last year's disappointing yields.

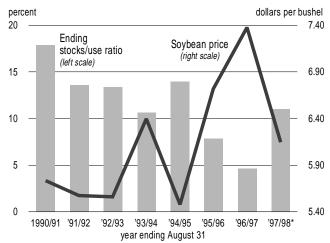
In contrast to corn, District soybean production is projected to register a sharp year-over-year gain of 17 percent to reach record high. Annual increases are expected in all District states and range from 7 percent in Illinois to over 60 percent in Michigan. At this point, all District states except Illinois will likely bring in a record soybean harvest. In general, the gains are fueled by increases in both yields and harvested acres. Furthermore, all District states except Indiana are expected to combine a record number of soybean acres.

With corn production expected to be steady when compared to last year, the year-over-year change in total supplies for the 1997/98 marketing year (September-August) is largely dictated by the change in initial stocks. Carry-over stocks are expected to be more than double that of last year, yet are still relatively low by historical standards. However, the larger stocks will push total supplies up by about 5 percent from the previous year. Looking to the demand side, domestic use is expected to register a moderate increase from the prior year on the basis of gains in both livestock feeding and use in the food, seed, and industrial (FSI) category. The amount of corn used

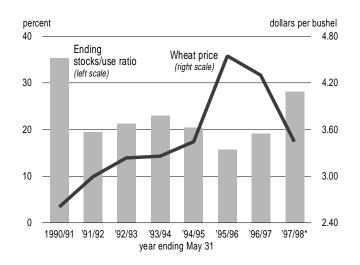
for FSI is projected to rise 5 percent, led by increased manufacture of high fructose corn syrup and ethanol. Furthermore, feed use is also expected to post a year-overyear gain of 5 percent as pork and poultry production expand. Overall, domestic use is projected at 7.33 billion bushels, a new high. In addition, foreign demand and improving export opportunities are expected to play a role in coming months. Foreign sales of U.S. corn are projected to rise 13 percent from last year, yet would remain nearly a tenth below the level of two years earlier. And while total use is not expected to reach a new high, the current projection indicates this would be only the second time it exceeded the 9 billion bushel mark. On balance, ending stocks are anticipated to decline about 8 percent to 864 million bushels. In comparison, ending stocks averaged 1.21 billion bushels earlier this decade, even when factoring in last year's low level.

Going into the 1997/98 marketing year, the initial level of soybean stocks is estimated to be a scant 115 million bushels, the lowest since 1977. But the record harvest will push supplies up by more than a tenth from the prior year. The ample supplies will be reflected in lower prices—compared to a year earlier—but will also encourage gains in both domestic disappearance and exports. The domestic crush (processing soybeans into meal and oil) is projected to post a moderate gain to a new high. The processing gains will be prompted by a modest year-over-year increase in the domestic use of meal and oil, and by proportionately larger gains in exports of these products. But the real news is soybean exports, which are off to a relatively fast start in the current marketing year (September-August) and are expected to hit a new high at 950 million

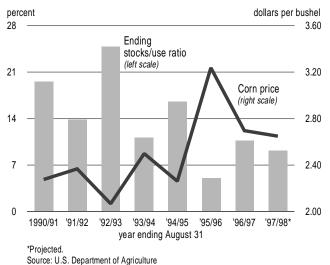
Soybean and wheat stocks are expected to rise relative to use



*Projected. Source: U.S. Department of Agriculture



Corn stocks/use projected to decline



bushels. If achieved, this would mark only the third time soybean exports exceeded 900 million bushels (the other years were 1981 and 1982). Overall, the sizable soybean crop will more than offset demand and raise ending stocks to a somewhat more comfortable level of about 285 million bushels.

Carryover wheat stocks going into the current marketing year (June-May) were much larger than a year earlier, and along with the production increase, pushed total supplies up a tenth from last year. Wheat imports mostly from Canada—are projected to be at about the same level as the previous year and represent about 3 percent of available supplies. In comparison, utilization is expected to register a much more modest year-overyear gain of 3 percent, as a decline in domestic usage is offset by a strong increase in exports. But despite the anticipated gain, foreign sales are still relatively low compared to most of this decade. In sum, ending wheat stocks are projected to rise to the highest level since 1990. Viewed from a different prospective, the ratio of ending stocks to use is expected to be nearly 28 percent, considerably higher than the average of about 20 percent from the prior six years.

Trade prospects for U.S. grains and oilseeds are highly dependent on foreign production prospects and consumption patterns. Corn producers in the U.S. stand to benefit in the upcoming year from an expected decline in foreign coarse grain production, especially in Argentina, China, and Canada. Despite the potential decline, consumption is projected to rise, pulling ending world stocks of

coarse grains lower next year. While potentially lower stocks are not a problem at the moment, they would become much more significant if production shortfalls occur next year. This concern has been heightened by the persistence of the El Nino weather pattern, which continues to hold the potential to change world production patterns. In contrast to coarse grains, ending stocks of wheat and oilseeds are expected to rise next year. World wheat production is projected to reach a record level in the 1997/98 crop year (partially due to a record crop in China, the worlds largest wheat producer) that will outstrip consumption and push ending world stocks higher. Yet the outlook for U.S. wheat exports improved because other major exporters experienced production problems. In particular, the USDA estimated the Australian and Canadian wheat harvests to be down by a third and a fifth, respectively, from the prior year. Furthermore, world oilseed production is expected to rise about 7 percent this year and push ending world stocks up by 40 percent.

The USDA also forecast average prices for the 1997/98 marketing year. Though corn prices will receive some support from the gains in domestic use and the improved export situation, the midpoint of the USDA's estimated range is \$2.65 per bushel, 5 cents less than the average for the prior year. In contrast, soybean and wheat prices will be pressured by larger domestic supplies. The midpoint of the estimated range for soybean prices is \$6.15, about 17 percent below the average of the past marketing year. The midrange of the wheat price forecast is \$3.45, a fifth lower than the prior year.

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AgLetter (ISSN 1080-8639) is published monthly by the Research Department of the Federal Reserve Bank of Chicago. It is prepared by Gary L. Benjamin, economic adviser and vice president, Mike A. Singer, economist, and members of the Bank's Research Department, and is distributed free of charge by the Bank's Public Information Center. The information used in the preparation of this publication is obtained from sources considered reliable, but its use does not constitute an endorsement of its accuracy or intent by the Federal Reserve Bank of Chicago.

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SELECTED AGRICULTURAL ECONOMIC INDICATORS

SELECTED AGRICULTURAL ECONOMIC INDICATO	IUKS	Value	Percent change from		
	Latest period		Prior period	Year ago	Two years ago
Prices received by farmers (index, 1990–92=100)	August	107	0.0	_9	4
Crops (index, 1990–92=100)	August	116	1.8	-13	1
Corn (\$ per bu.)	August	2.47	1.6	-43	-6
Hay (\$ per ton)	August	101.00	2.6	9	23
Soybeans (\$ per bu.)	August	7.10	-5.7	– 9	22
Wheat (\$ per bu.)	August	3.49	8.0	-24	-18
Livestock and products (index, 1990–92=100)	August	99	-1.0	- 5	8
Barrows and gilts (\$ per cwt.)	August	56.70	-5.0	-6	14
Steers and heifers (\$ per cwt.)	August	65.80	0.6	2	7
Milk (\$ per cwt.)	August	12.70	4.1	-20	2
Eggs (¢ per doź.)	August	63.5	-3.3	-14	1
Consumer prices (index, 1982–84=100)	August	161	0.2	2	5
Food	August	158	0.4	3	6
Production or stocks					
Corn stocks (mil. bu.)	June 1	2,495	N.A.	45	-27
Soybean stocks (mil. bu.)	June 1	499	N.A.	-20	-37
Wheat stocks <i>(mil. bu.)</i>	June 1	444	N.A.	18	-12
Beef production (bil. lb.)	July	2.26	5.8	3	8
Pork production (bil. lb.)	July	1.35	3.1	1	4
Milk production* (bil. lb.)	August	11.3	-1.6	4	4
Receipts from farm marketings (mil. dol.)	May	13,286	-8.6	-3	-3
Crops**	May	5,727	-13.6	-7	-3
Livestock	May	7,539	-4.3	2	4
Government payments	May	20	-28.6	- 79	-97
Agricultural exports (mil. dol.)	June	4,132	-5.4	-6	4
Corn (mil. bu.)	June	113	-7.7	-18	-33
Soybeans (mil. bu.)	June	32	-21.0	-38	– 9
Wheat (mil. bu.)	June	68	35.4	-11	–17
Farm machinery sales (units)		4.000			
Tractors, over 40 HP	August	4,896	-11.5	8	13
40 to 100 HP	August	3,560	-10.2	7	12
100 HP or more	August	1,336	-14.8	12	17
Combines	August	647	-25.6	1	-14

N.A. Not applicable

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^{*20} selected states.

^{**}Includes net CCC loans.