Federal Reserve Bank of Chicago . . .

Agricultural Letter

October 14, 1977

Number 1452

CORN AND SOYBEAN PRODUCTION estimates were raised slightly by the U.S. Department of Agriculture this week. Based on conditions as of October 1, the corn harvest is expected to total 6.3 billion bushels, 1 percent above both the September forecast and the previous record of last year. Total feed grain production is estimated at 200 million metric tons, 4 percent larger than the 1976 harvest. Soybean production is now expected to reach 1.65 billion bushels, up nominally from last month's forecast, 30 percent above the 1976 harvest, and 6 percent larger than the 1973 record. Although projected corn utilization for the 1977/78 marketing year has also been raised, prices of both corn and soybeans are likely to be depressed by a large buildup in carryover stocks.

Among District states, this month's revisions in corn and soybean production estimates were nominal. Per acre corn yield estimates in Illinois, Michigan, and Wisconsin remain the same as last month, as do the soybean yield estimates in Indiana and Wisconsin (see *Agricultural Letter*, No. 1448). The corn yield estimate for Indiana was raised two bushels per acre from the previous forecast, while that for Iowa was increased one bushel. Per acre soybean yields in Illinois and Iowa were lowered one bushel from the September estimate while the new estimate for Michigan was raised one bushel. Nationwide, corn yields are now expected to average 90.8 bushels per acre, while soybean yields are pegged at 28.3 bushels per acre.

The upward revision in the corn production estimate surprised most observers. Recent reports of stalk lodging and dropped ears, mold, aflatoxin, and rain-delayed harvests were generally expected to result in a slight downward revision in this month's estimate. Some of these conditions may still be reflected in future estimates when an assessment of harvesting losses can be more readily determined. Historically, however, October estimates for both corn and soybeans have been close to the final estimates.

The impact of the upward revised corn production estimate has been partially offset by prospects for larger corn exports. Although large harvests are still anticipated, grain production estimates for areas other than the United States—primarily the Southern Hemisphere and the USSR—have been reduced somewhat over the past month. The projected USSR grain harvest has been lowered 5 million metric tons to 215 million metric tons—down from last year's record of 224 million tons—while estimated USSR net imports have been boosted by a like amount to 13 million metric tons. Moreover, following a recent meeting between U.S. and USSR authorities, it was announced that the United States has granted authorization to the USSR to import up to 15 million metric tons of grain from the United States during 1977/78 without consultation. (The five-year agreement permitted up to 8 million metric tons without consultation.)

1977/78 supply and utilization estimates for corn and soybeans

	Corn		Soybeans	
	Million bushels	Change from 1976/77	Million bushels	Change from 1976/77
		(percent)		(percent)
Supply				
Beginning stocks	876	120	103	-58
Production	6,303	1	1,647	30
Total	7,180	9	1,750	16
Utilization				
Domestic	4,280	5	925	10
Exports	1,550	-7	610	8
Total	5,830	2	1,535	9
Ending stocks	1,350	54	215	109

*Includes an estimated 1 million bushels of imports.

SOURCE: U.S. Department of Agriculture.

In line with these developments, the U.S. Department of Agriculture has raised its estimates of both corn and wheat exports. 1977/78 corn exports are now expected to approximate 1.55 billion bushels, 100 million bushels above the mid-September projection, but down 125 million from the high level estimated for the year just ended. Despite the upward revision, ending 1977/78 carryover stocks of corn are likely to approach 1.35 billion bushels, the highest since the early sixties. Soybean carryover stocks are projected to rise to 215 million bushels, a level exceeded only twice.

The price outlook for corn and soybeans has not been materially altered by the latest reports. For the near term, corn and soybean prices may retreat somewhat following the recent gains that have occurred in conjunction with the weather-related harvesting problems, larger-than-expected exports in September, and the reports of various infestations. The downward pressures could be particularly evident if the labor-related problems at Chicago and the Gulf Port result in a further breakdown in the market distribution channels, or if weather conditions permit a rapid completion of the harvest. For the longer term, the huge accumulation of carryover stocks will hold corn prices at around the $2 support level. Soybean prices will likely fluctuate in the $4.50 to $5.25 per bushel range in the months ahead, considerably below the levels experienced earlier this year.

Gary L. Benjamin
Agricultural Economist

AGRICULTURAL ECONOMIC DEVELOPMENTS

Subject	Unit	Latest period	Value	Percent change from: Prior period	Percent change from: Year ago
INDEX OF PRICES					
Received by farmers	1967=100	September	173	− 1.1	− 7
Crops	1967=100	September	168	− 2.9	− 18
Livestock	1967=100	September	177	0	+ 3
Paid by farmers	1967=100	September	201	− 0.5	+ 4
Production items	1967=100	September	197	− 1.0	+ 2
Wholesale price index *(all commodities)*	1967=100	September	195	+ 0.4	+ 6
Foods	1967=100	September	190	− 0.2	+ 7
Processed foods and feeds	1967=100	September	184	− 0.5	+ 4
Agricultural chemicals	1967=100	September	190	+ 0.5	+ 2
Agricultural machinery and equipment	1967=100	September	200	+ 1.0	+ 8
Consumer price index *(all items)*	1967=100	August	183	+ 0.4	+ 7
Food at home	1967=100	August	193	+ 0.2	+ 7
CASH PRICES					
Corn	dol. per bu.	September	1.59	− 2.5	− 39
Soybeans	dol. per bu.	September	4.81	−11.3	− 28
Wheat	dol. per bu.	September	2.17	+ 1.9	− 25
Sorghum	dol. per cwt.	September	2.60	− 1.1	− 38
Oats	dol. per bu.	September	1.00	+ 5.0	− 36
Steers and heifers	dol. per cwt.	September	37.60	+ 0.3	+ 8
Hogs	dol. per cwt.	September	40.20	− 6.1	+ 1
Milk, all sold to plants	dol. per cwt.	September	9.89	+ 2.1	+ 1
Broilers	cents per lb.	September	24.0	+ 0.4	+ 5
Eggs	cents per doz.	September	52.6	+ 2.1	− 14
INCOME *(seasonally adjusted annual rate)*					
Cash receipts from farm marketings	bil. dol.	2nd Quarter	99	+ 3.2	− 1
Net realized farm income	bil. dol.	2nd Quarter	22	− 3.6	− 15
Nonagricultural personal income	bil. dol.	August	1,517	+ 0.6	+ 11
FARM FINANCE					
Total deposits at agricultural banks[1]	1972-73=100	August	170	+ 0.4	+ 11
Time deposits	1972-73=100	August	210	+ 0.8	+ 18
Demand deposits	1972-73=100	August	122	− 1.0	+ 1
Total loans at agricultural banks[1]	1972-73=100	August	209	+ 0.6	+ 23
Production credit associations					
loans outstanding:					
United States	mil. dol.	August	14,133	+ 0.7	+ 15
Seventh District states	mil. dol.	August	2,671	+ 1.3	+ 22
loans made:					
United States	mil. dol.	August	1,281	− 0.8	+ 9
Seventh District states	mil. dol.	August	256	+ 0.6	+ 18
Federal land banks					
loans outstanding:					
United States	mil. dol.	August	20,658	+ 1.1	+ 16
Seventh District states	mil. dol.	August	4,155	+ 1.3	+ 23
new money loaned:					
United States	mil. dol.	August	310	−18.9	+ 21
Seventh District states	mil. dol.	August	69	−12.4	+ 25
Interest rates					
Feeder cattle loans[2]	percent	2nd Quarter	8.73	+ 0.2	0
Farm real estate loans[2]	percent	2nd Quarter	8.92	0	0
Three-month Treasury bills	percent	9/29–10/5	5.98	+ 0.8	+ 18
Federal funds rate	percent	9/29–10/5	6.41	+ 0.9	+ 24
Government bonds *(long-term)*	percent	10/3–10/7	7.63	+ 0.3	− 1
AGRICULTURAL TRADE					
Agricultural exports	mil. dol.	July	1,749	− 7.1	− 3
Agricultural imports	mil. dol.	July	1,015	−18.2	+ 6
FARM MACHINERY SALES					
Farm tractors	units	August	8,279	+ 1.2	− 6
Combines	units	August	2,850	−13.3	− 9
Balers	units	August	2,628	−30.6	− 24

[1] Member banks in Seventh District having a large proportion of agricultural loans in towns of less than 15,000 population.

[2] Average of rates reported by district agricultural banks.