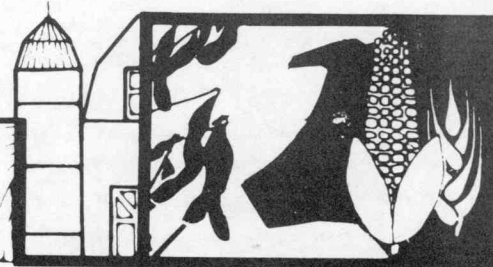


Make copy for me  
J. Waite

FEDERAL RESERVE BANK OF CHICAGO

# AGRICULTURAL



ISSN 0002 - 1512

August 22, 1980

Number 1532

# LETTER

Waite Memorial Book Collection  
Division of Agricultural Economics

**CROP PRODUCTION PROSPECTS** have been significantly reduced by weather damage this summer. The USDA's latest forecasts suggest that feedgrain and soybean production will be down a sixth from last year and considerably below the amounts utilized during the 1979/80 marketing year. Carryover stocks are adequate to cover the prospective gap between production and utilization. But the drawdown in carryover stocks will be substantial, holding corn and soybeans prices at high levels.

This year's corn crop is now expected to fall to a three year low of 6.65 billion bushels, according to the USDA's latest estimate which is based on August 1 conditions. Last year, 7.76 billion bushels of corn were harvested and in 1978, 7.09 billion bushels were produced. The production estimate assumes 71.4 million acres of corn will be harvested for grain—down 3 percent from the June estimate but up slightly from a year ago—and that the yield per harvested acre will be 93 bushels. Per acre corn yields were 109.4 bushels last year, 100.8 bushels in 1978, and averaged 88.3 bushels in 1975-77.

Soybean production for this year is expected to decline to a two-year low of 1.88 billion bushels, down from 2.27 billion in 1979. About 68.6 million acres of soybeans are likely to be harvested—down 2.7 percent from last year—and per acre yields are expected to fall to 27.4 bushels. Per acre soybean yields were 32.2 bushels last year, 29.5 bushels in 1978, and averaged 28.5 in 1975-77.

August crop production estimates are usually a reliable indicator of the size of the pending harvest. But over the past decade, deviations between the August estimate and the final estimate have averaged 5.9 percent for corn and 4.6 percent for soybeans. Deviations of this magnitude, although tolerable with respect to total production, can have wide-ranging implications for the potential imbalance between production and utilization and the resulting change in carryover stocks.

In 7 out of the past 10 years, August production estimates for corn and soybeans have been below the final estimate. Nevertheless, many analysts believe forth-

## Corn and soybean production expected to be down in all district states except Wisconsin

	Per acre yields		Total production		
	1979	1980*	1979	1980*	Change
	(bushels)		(million bushels)		(percent)
<b>Corn</b>					
<i>District states</i>					
Illinois	128.0	108.0	1,358	1,202	-11
Indiana	112.0	98.0	664	608	- 9
Iowa	127.0	108.0	1,626	1,426	-12
Michigan	95.0	90.0	238	220	- 7
Wisconsin	103.0	101.0	307	323	5
<i>Other selected states</i>					
Kansas	117.0	85.0	172	106	-38
Kentucky	102.0	80.0	133	120	-10
Minnesota	100.0	93.0	606	549	- 9
Missouri	103.0	45.0	229	90	-61
Nebraska	115.0	93.0	794	632	-20
Ohio	115.0	112.0	417	431	3
South Dakota	74.0	52.0	211	114	-46
United States	109.4	93.0	7,764	6,646	-14
<b>Soybeans</b>					
<i>District states</i>					
Illinois	38.5	35.0	374	324	-13
Indiana	36.0	34.0	159	148	- 7
Iowa	38.0	36.0	310	297	- 4
Michigan	29.5	28.0	29	27	- 7
Wisconsin	34.0	34.0	10	11	12
<i>Other selected states</i>					
Arkansas	28.0	18.0	144	82	-43
Louisiana	28.0	24.0	90	82	- 9
Minnesota	32.0	31.0	167	147	-12
Mississippi	29.0	21.0	119	83	-30
Missouri	31.5	21.0	187	118	-37
Ohio	36.0	34.0	145	128	-12
Tennessee	27.0	21.0	71	54	-24
United States	32.2	27.4	2,267	1,880	-17

\*USDA estimates based on August 1 conditions.

coming estimates will show even larger declines in this year's corn and soybean harvests. Most of the damage to corn that occurred last month is irreversible and future estimates may show more corn acreage will be cut for silage rather than harvested for grain. Soybeans have a greater capability than corn to recover from weather-stress in July. But the stress on soybeans in many areas apparently continued until mid-August when relieved by beneficial rains.

Crop production in most other Northern Hemisphere countries will be up this year, but in general is not expected to surpass earlier peaks. Wheat production in India declined this spring, but a sharp recovery in production of rice and coarse grains this fall may lead to 10 percent increase in total grain production in India this year. Grain production in the Soviet Union is expected to be up a sixth or more from last year's poor harvest. In both India and the USSR, however, this year's produc-

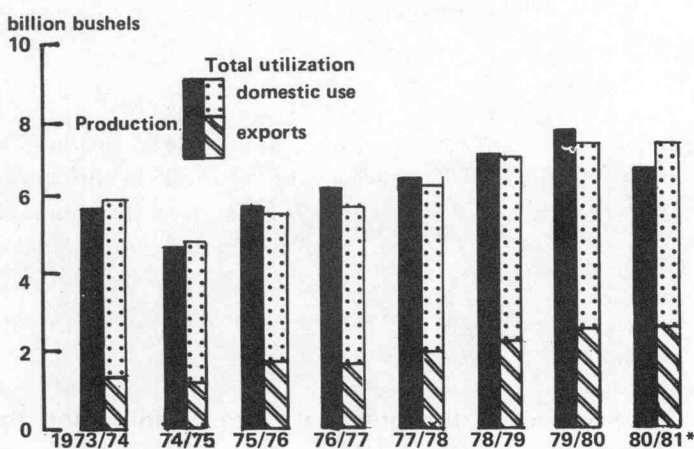
tion will likely be well below the peaks set two years ago. In Western and Eastern Europe, grain production is expected to be up 5 percent from last year and nominally above the levels of two years ago. A sharp decline for wheat is expected to hold Canadian grain production 7 percent below last year and 18 percent below two years ago.

Whether future estimates of domestic production are higher or lower than the August estimates, it is now fairly clear that this year's shortfall in production will necessitate a drawdown of some magnitude in the burdensome carryover stocks of corn and soybeans. Current estimates for the marketing year that ends this month show total utilization of soybeans will likely approach 2.06 billion bushels. For the 1980/81 marketing year, the USDA is projecting a slight decline in both exports and crushing and a drop in total utilization to less than 2.0 billion bushels. Compared to the August production estimate, the projected level of utilization suggests carryover stocks of soybeans will likely decline from 400 million bushels at the end of August to around 300 million bushels a year from now.

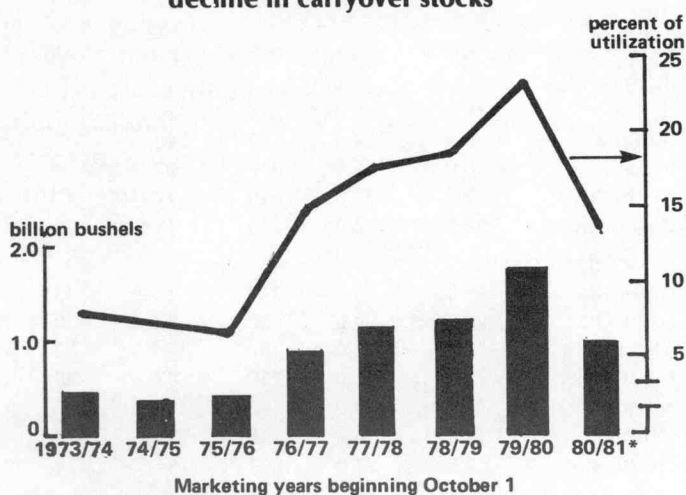
Utilization of corn during the current marketing year that ends on September 30 is expected to reach a new high of 7.35 billion bushels. For the 1980/81 marketing year, the USDA is projecting utilization will remain about the same with slightly larger exports offsetting the anticipated decline in domestic consumption. In light of the August estimate of this year's harvest, the projected level of utilization portends carryover stocks of corn will be pulled down from about 1.7 billion bushels this year to around 980 million bushels in September of 1981. As a percent of utilization, that would be the lowest carryover since the fall of 1976.

A large share of this fall's carryover of corn will be held in the farmer-owned grain reserve or owned by the Commodity Credit Corporation. About 260 million bushels of corn are owned by the CCC and about 855 million bushels are in the three-year reserve. The bulk of the corn now in the reserve will have to be pulled out sometime within the next year if current production and utilization estimates prove reliable. A small share of the reserve corn is covered by contracts signed in 1978. Unless replaced by new contracts, this corn will automatically start coming out of the reserve next spring as the original three-year contracts begin to expire. To pull the rest of the corn that is needed from the reserve, corn prices to farmers—as a minimum—will have to temporarily reach the "call" level.

### This year's expected shortfall in corn production . . .

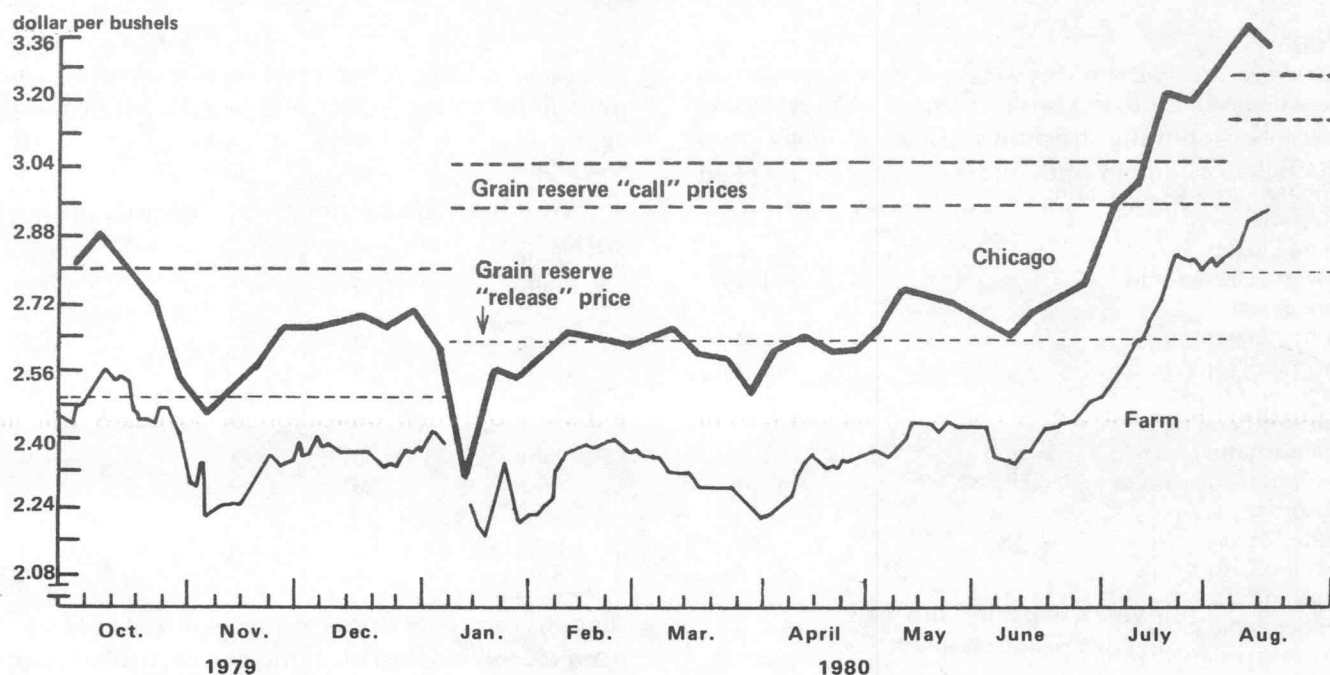


### . . . will likely result in a substantial decline in carryover stocks



\*USDA estimates based on August 1 conditions

### The upswing in prices has put the corn reserve in release status



\*SOURCE: Doane Agricultural Service, Inc.,

The Administration's recent decision to raise loan rates on grain has raised the release and call prices for all grains enrolled in the reserve. The release price for corn has been raised from \$2.63 per bushel to \$2.81 per bushel. The call price for "old" corn reserve contracts—contracts signed prior to the Soviet embargo—has been raised from \$2.94 to \$3.15 per bushel, while the call price on "new" contracts has been raised from \$3.05 to \$3.26 per bushel. When farm prices of corn are above the release level—as has been the case since mid-July—farmers can voluntarily withdraw from the reserve by repaying the CCC loans on the grain they hold in the reserve. If prices reach the call level, farmers in the reserve program must repay their CCC loans or forfeit the grain to the CCC. When the call on old contract corn is triggered, farmers have 30 days to repay the CCC loans. A call on new contract reserve corn requires payment within 90 days.

Corn and soybean prices have risen sharply over the past two months as the evidence of problems in domestic production began to mount. In the weeks ahead,

prices are likely to remain quite volatile as production estimates here and abroad are refined. While future revisions to production estimates may be relatively minor, small changes in production can have significant implications for the prospective gap between production and utilization and the resulting impact on carryover stocks.

Reflecting the potential price volatility and the uncertainty regarding production and utilization, the USDA has forecast a wide range for average corn and soybean prices in the year ahead. Corn prices received by farmers during the 1980/81 marketing year are expected to average somewhere between \$2.90 and \$3.40 per bushel. Average soybean prices are expected to range from \$6.50 to \$9 per bushel. Preliminary indications for the 1979/80 marketing years show corn prices averaged about \$2.50 per bushel and soybeans prices averaged \$6.25 per bushel.

## Selected agricultural economic developments

Subject	Unit	Latest period	Value	Percent change from	
				Prior period	Year ago
<b>Farm finance</b>					
Total deposits at agricultural banks†	1972-73=100	July	208	+ 0.4	+ 6
Time deposits	1972-73=100	July	260	+ 0.3	+12
Demand deposits	1972-73=100	July	121	+ 0.9	- 9
Total loans at agricultural banks†	1972-73=100	July	253	- 0.2	+ 2
Production credit associations					
Loans outstanding					
United States	mil. dol.	June	20,195	+ 1.7	+21
Seventh District states	mil. dol.	June	4,164	+ 2.0	+24
Loans made					
United States	mil. dol.	June	2,431	- 6.1	+13
Seventh District states	mil. dol.	June	532	- 3.5	+16
Federal land banks					
Loans outstanding					
United States	mil. dol.	June	33,681	+ 1.6	+24
Seventh District states	mil. dol.	June	7,904	+ 1.9	+30
New money loaned					
United States	mil. dol.	June	627	-24.1	+ 5
Seventh Distict states	mil. dol.	June	168	-20.3	+ 7
Interest rates					
Feeder cattle loans††	percent	2nd Quarter	15.55	+ 1.5	+46
Farm real estate loans††	percent	2nd Quarter	14.82	+ 1.5	+39
Three-month Treasury bills	percent	8/7-8/13	8.60	+ 7.2	- 9
Federal funds rate	percent	8/7-8/13	8.85	- 1.4	-18
Government bonds (long-term)	percent	8/7-8/13	10.91	+ 6.8	+22
<b>Agricultural trade</b>					
Agricultural exports	mil. dol.	June	3,018	- 5.8	+ 9
Agricultural imports	mil. dol.	June	1,476	+ 2.9	- 2
<b>Farm machinery sales<sup>P</sup></b>					
Farm tractors	units	July	10,130	-11.9	+20
Combines	units	July	2,395	+58.3	-19
Balers	units	July	3,040	+15.5	-19

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

††Average of rates reported by District agricultural banks at beginning and end of quarter.

<sup>P</sup>Preliminary.

### Waite Memorial Book Collection Division of Agricultural Economics

**FEDERAL RESERVE BANK  
OF CHICAGO**  
Public Information Center  
P. O. Box 834  
Chicago, Illinois 60690  
Tel. no. (312) 322-5112



FIRST-CLASS MAIL  
U.S. POSTAGE  
PAID  
Chicago, Ill.  
Permit No. 1942

HEAD-DEPT. OF AGRIC. ECON. AGL  
INSTITUTE OF AGRICULTURE  
UNIVERSITY OF MINNESOTA  
ST. PAUL, MINNESOTA 55101