



October 20, 1998

Ames, Iowa

Econ. Info. 1752

## **U.S., WORLD CROP ESTIMATES TIGHTEN SOYBEAN SUPPLY-DEMAND:**

USDA's domestic and world crop estimates show a less burdensome world supply-demand balance for soybeans in the current marketing year than previously expected. That news may prevent local cash prices from dropping much below the Commodity Credit Corporation loan rates for the remainder of the harvest, and should reinforce earlier indications of modestly higher potential soybean prices during the spring planting season. Farmers who have not yet taken soybean Loan Deficiency Payments or cashed out marketing loans may find the potential gains from using these tools will be quite limited from this point onward. From time to time over the next few weeks, modest LDPs may reappear, although they may not last long. USDA's October 9 crop report showed the largest September to October percentage decline for soybeans in 45 years, with nearly a 5% decrease from last month. Indicated yields were decreased 3 bushels per acre from a month earlier in Indiana and Illinois, along with declines of 4 bushels in Iowa and 5 bushels in Nebraska, thus significantly reducing the prospective supply for the year ahead.

The potential U.S. soybean carryover for August 31, 1999 is slightly below 400 million bushels or about an eight-week supply at the end of the current marketing year. That is by no means tight, but is less burdensome than the 11-week supply expected before the October 9 reports. Stocks at the projected level represent about a one-month reserve supply beyond minimum trade needs at the end of the marketing year. Even with the lower crop estimate, U.S. production is still indicated to set a new record, up 2% from last year's crop and up 5% from last season's total utilization. The large crop reflects a sharp increase in U.S. soybean plantings in the last few years, particularly in wheat/grain sorghum areas that now have flexibility to include soybeans in crop rotations. U.S. soybean acreage this year is estimated to be up 13% from two years ago and up 18% from four years earlier.

Large U.S. and South American old-crop supplies point to continued strong competition in world markets, at least until mid-winter. U.S. soybean export shipments through early October and outstanding unshipped sales were down 28% from a year earlier, along with declines of 26% and 10%, respectively, in soybean meal and oil shipments and outstanding sales. While sales lag well behind those of a year ago because of competition and weak Asian demand, a weaker dollar recently has stimulated export sales slightly. The competitive world market is expected to temper soybean price strength for the first several months after harvest, until the trade shifts its focus to 1999 weather and crops. Carryover stocks remain low enough that prices could react rather strongly to major 1999 weather problems.

### **S.A. Crop Estimate Up for 1998, Down for 1999**

In its world crop report, USDA increased its projected soybean production in Argentina for harvest next spring by 55 million bushels from a month earlier. Even so, Brazil and Argentina are expected to harvest fewer soybeans next spring than a year ago. Their 1998 harvests were up an estimated 16% and 64%, respectively, from the spring of 1997 due to extra acreage and good weather. Combined 1999 production in the two countries is projected to be down 8% or 155 million bushels from the spring of 1998, assuming weather is reasonably good but not outstanding. A reduction of that size would be positive for spring and summer U.S. soybean and soybean product exports.

## Soybean Indicators to Watch

Key soybean market indicators to watch in the next several weeks will include U.S. export sales reports released on Thursdays, South American planting season weather, and Chinese purchasing activity. The World Crop Report estimates China's 1998 soybean crop is down 8% or 45 million bushels from last year, along with declines in its cottonseed and other oilseed crops which also produce protein meal.

## Corn Estimate

USDA's domestic corn crop estimate should be a relatively minor but slightly positive influence on corn prices from mid-October through early winter, also setting the stage for reduced corn LDPs and benefits from Marketing Loans. The nation's estimated corn production was increased a very small five million bushels from a year earlier, and carryover stocks are still expected to increase substantially in the year ahead. Projected carryover stocks at a 9.5 week supply next August 31 and absence of a mechanism to isolate excess supply from the market appear likely to hold prices near or below local CCC loan rates for much of the remaining harvest season.

Reductions in USDA estimates of several foreign feed grain crops should set the stage for modestly higher cash corn prices during the spring planting season. In the World Crop Report, the global feed grain production estimate for this year was lowered about 450 million bushels from last month and now is 0.6% or about 220 million bushels below that of last year. The October production estimates were lowered slightly from a month earlier in the European Union, Eastern Europe, and the Former Soviet Union.

China remains a potential key influence on corn as well as soybean prices. The USDA now projects China's

1998 corn crop to be up nearly 780 million bushels from last year's drought-reduced harvest. USDA analysts believe China's corn crop suffered very little damage from the August floods, in contrast to modest damage to soybeans, cotton, and rice.

The October crop report points to a slightly less severe storage space shortage for the last part of the corn harvest than previously indicated. Total U.S. corn and soybean supplies this fall are indicated to be 2.5% above the fall of 1994, when an extreme lack of storage space occurred in much of the Corn Belt. Total new and old-crop Iowa supplies are now indicated to be one-fourth percent lower than four years ago.

## Farm Assistance Pending

Congress is currently putting the finishing touches on a farm assistance package, but details are still sketchy. Total assistance was placed at \$6 billion, some of which is expected to be used for a one-year increase in Production Flexibility Payments. It appears that loan rates will not be increased. Some food-aid assistance to Russia may be provided. Russia's wheat crop is estimated to be about one-third smaller than last year, along with a feed grain crop that is just over half as large as last year's good crop.

...Robert Wisner

## OCTOBER CATTLE ON FEED SUMMARY

The USDA October 1998 Cattle on Feed report estimated that there were 2% fewer cattle in feedlots with 1,000 head capacity or larger in the 7 major cattle feeding states (Table 1). This figure was near trade expectations and traders immediately considered the report neutral to bearish.

**Table 1. Oct, 1998 Cattle on Feed Summary, 1,000 + Head Lots, 7 Major States.**

	Head 1,000	% of 1997	Pre- report Expected
On Feed Oct 1	8,376	98	97
Placed Sep	2,254	99	94
Marketed Sep	1,577	103	103
Other Disap Sep	51	121	

September placements were down 1% from the year before, but were 5% larger than expected (Table2). The largest weight class for placements and the only class larger than the year before was the 800+ pound class. The increase in heavier cattle has occurred throughout 1998 and has contributed to the heavy carcass weight problem. *However, the 25,000 additional cattle in this class will only partially fill the void left by 88,000 fewer placements in the 700-799 class in August—cattle that would have the same marketing date.* Carcass weights may remain high at the end of the year when these cattle will be sold, but the number of cattle will not be as large as a year ago.

**Table 2. U.S. Placements in September by Weight Class.**

Weight Class	1,000 Head		% of	% of
	1997	1998	1997	Total
Under 600	480	433	90.2	16.3
600-699	498	479	96.2	18.1
700-799	817	796	97.4	30.0
800 Plus	916	941	102.7	35.5
Total	2,711	2,649	97.7	100.0

The mix of cattle in feedlots indicates that liquidation of the breeding herd is continuing. Heifers made up 38.7% of the cattle in lots on October 1 (Table 3). That compares with 39.1%, 37.4%, and 33.8% heifers in lots on October of 1997, 1996, and 1995, respectively. There are 1.1 million more heifers in 7-State feedlots in October 1998 compared with October 1995.

**Table 3. Class of Cattle on Feed October 1, U.S. 1,000+ Head Lots.**

	Head 1,000	% of 1997	% of Total
Steers	5,945	98	61.0
Heifers	3,770	97	38.7
Cows and Bulls	32	97	0.3

When heifer retention increases again as ranchers and farmers begin to rebuild their breeding herds, the number of feeder cattle for placement in feedlots will decrease and lead to higher feeder cattle prices. The supply of beef will also decline a few months later and lead to higher fed cattle prices. However, given the recent feedlot losses, the feedlots may wait to see the higher fed prices before bidding up on the feeder cattle.

The expansion may also be slow to develop, as heifer retention has been lower than the previous year since July 1994. The existing cowherd is older and will have higher culling rates. It will either take more heifers or more time to expand the herd.

### 1998 Calf Marketing Decisions

The cost of producing a calf varies greatly across herds depending largely on pasture cost and the amount of harvested forages used. Beef cow-calf operations in the 1997 Iowa State University Extension Standardized Performance Analysis (SPA) program had average financial cost near \$330 per cow and average total economic cost near \$430 per cow (Table 4). Economic costs include opportunity costs of resources used, including family labor, and equity and depreciation. Financial costs are similar to out-of-pocket costs.

**Table 4. 1997 Iowa State University Extension SPA Summary.**

	Head	Average Weight
Cow inventory Jan. 1		99
Total calves sold	86	471
Calves sold / cow	86.8%	419
Total breeding stock sold	18	1167
Breeding stock sold / cow	18.2%	212
	Financial	Economic
Cost per cow	\$331.64	\$433.21

If 1998 performance and costs are similar to those of 1997, the approximate 200 pounds of breeding stock sold will result in \$80-90 of revenue per cow. The sale of calves will need to average \$240-250 per cow to cover financial cost and about \$100 more to cover economic cost. At 420 pounds sold per cow, the average sale price would need to be \$58/cwt to cover financial and \$82/cwt to cover economic cost. The likely mix of calves sold will be two-thirds or more steers and one-third heifers depending on heifer retention. The current forecast of calf prices is lower than the economic breakeven, but well above the financial breakeven.

Table 5 is a projected budget for retaining ownership of the steer calves in either a backgrounding or finishing program in a commercial feedlot. **Both strategies project positive returns over current calf prices.** Herds that have the facilities, equipment, labor, and management to feed these calves at home would also earn the yardage expense less out of pocket expenses. This example uses future closing prices

for October 16 and a five-year average basis. Price risk on these strategies must be accounted for, and a futures or put option hedge to protect against lower selling prices should be considered.

**Table 5. Projected Returns to Retained Ownership of 1998 Steer Calves, October 16, 1998.**

	Bckgrnd.	Finish
In -Out Weights	500-775#	550-1150#
Days on Feed	125	210
Projected Marketing Date	18-Feb-99	14-May-99
<b>OPPORTUNITY COST IF SOLD</b>		
Feeder Price/cwt	\$79.00	\$77.50
Feeder Cost	\$395.00	\$426.25
<b>FEED COSTS:</b>		
Corn Bu. Fed	26.5	61.0
Corn Cost (\$1.90 /bu)	\$50.35	\$115.90
Hay fed (as fed tons)	0.30	0.65
Hay Cost (\$55.00 /T)	\$16.50	\$35.75
Supplement Used - in lbs.	125	191
Supplement Cost (\$0.155/lb)	\$19.38	\$29.61
<b>TOTAL FEED COSTS:</b>	<b>\$86.23</b>	<b>\$181.26</b>
Vet medical	\$6.00	\$8.00
Interest (Feeder+1/2Feed 9%)	\$13.59	\$26.97
Death Loss (1.5% of purchase)	\$5.93	\$6.39
Transportation/Mkting Cost	\$6.50	\$8.80
<b>Table 5. (continued)</b>		
<b>TOTAL OTHER COSTS</b>	<b><u>\$32.02</u></b>	<b><u>\$50.17</u></b>

<b>TOTAL VAR. COSTS (/hd)</b>	<b>\$513.25</b>	<b>\$657.67</b>
Yardage @ \$.30 / head/ day	<u>\$37.50</u>	<u>\$63.00</u>
<b>TOTAL COSTS (per hd)</b>	<b>\$550.75</b>	<b>\$720.67</b>
<b>Necessary Selling Price/cwt:</b>		
To Cover Variable Costs	\$66.23	\$57.19
To Cover Total Costs	\$71.06	\$62.67
Futures Price as of 16-Oct-98	\$74.05	\$64.47
Estimated Basis	<u>+\$1.40</u>	<u>+\$2.00</u>
Expctd Price/cwt by Hedging	\$75.45	\$66.47
<b>Est. Return over Var. Costs/head</b>	<b>\$71.49</b>	<b>\$106.73</b>
<b>Est. Return over Total Costs/head</b>	<b>\$33.99</b>	<b>\$43.73</b>

...John Lawrence