# FEED OUTLOOK

**United States Department of Agriculture** 



Approved by the World Agricultural Outlook Board

November 14, 2000

### **HIGHLIGHTS**

- o Feed Grain Production Decreased from Last Month, Ending Stocks Down
- o Corn, Sorghum, Barley, and Oats Production Decreased from Last Month
- o Foreign Coarse Grain Production Forecast Down Slightly
- o Global Trade Forecast for 2000/01 Increased

### FEED GRAIN SUPPLY DECREASES FROM LAST MONTH

U.S. feed grain production in 2000 is forecast at 276 million metric tons, down 1 percent from a month ago but up 5 percent from 1999. Production of all feed grains are down. Feed grain supply in 2000/01 is forecast at 328 million tons, down 1 percent from last month, but up 3 percent from 1999/2000. Supplies are up from last year because of larger production.

Total feed grain use is projected at 280 million tons, unchanged from last month and up 12 million from 1999/2000. This month, lower production and unchanged use resulted in lower forecast stocks from last month and last year.

On a September-August marketing year, feed and residual use for the four feed grains plus wheat in 2000/01 is up 300,000 from last month and down 290,000 tons from last year. The projected index of grain consuming animal units (GCAUs) for 2000/01 is 90.1 million units, down 0.2 million from last month but up 1.0 million from 1999/2000. Feed and residual used per GCAU in 2000/01 is 1.85 tons, down 1 percent from 1999/2000. In the index components for 2000/01, GCAUs for dairy, hogs, and poultry are up from 1999/2000 and those for cattle and sheep are down. GCAU's for poultry were lowered this month because of a slowing in the rate of increase in expected broiler production in the remainder of 2000 and in 2001.

## CORN PRODUCTION FORECAST LOWERED FROM LAST MONTH

Corn production in 2000 is forecast at 10,054 million bushels, down 138 million from last month but up 617 million from 1999. The average corn yield is forecast at 137.7 bushels per acre, compared with last month's 139.6 bushels and the actual 1999 yield of 133.8 bushels. This year's yield is the Feed Outlook / FDS-1100 / November 2000 Page 1

second highest ever, trailing only the 138.6 bushels per acre in 1994. The yield decrease resulted from declines in 11 States, including all of the largest producing States.

Forecast ending stocks in 2000/01 are 1,679 million bushels, down 8 percent from last month and down 2 percent from 1999/2000. Corn use in 2000/01 is unchanged from last month. With decreased corn production in 2000/01 leading to lower ending stocks, prices are stronger. The forecast price for 2000/01 is \$1.70-\$2.10 per bushel, up from last month's \$1.65-\$2.05. In 1999/2000, the season-average price received by farmers is expected to be \$1.80.

# SORGHUM CROP DECREASED THIS MONTH

Sorghum production in 2000 is forecast at 463 million bushels, down 2 million bushels from last month because of lower yields. Production is down 22 percent from 1999's 595 million bushels. Yields are forecast at 60.4 bushels per acre, down 0.3 bushel from last month and 9.3 bushels below last year.

With smaller supplies this month and use unchanged, ending stocks in 2000/01 decreased to the lowest since 1997/98. The forecast season-average price for sorghum was raised 10 cents on each end of the range in line with the corn price. In the 1998/99 marketing year, prices received by farmers for sorghum averaged 86 percent of the corn price. The 2000/01 sorghum price ranges between 91 to 93 percent of the expected corn price, reflecting the stronger sorghum prices relative to corn thus far in the marketing year. The estimated price for 1999/2000 is \$1.55 per bushel, or 86 percent of the estimated corn price.

## BARLEY PRODUCTION DECREASES

Barley production for 2000 is estimated at 318 million bushels, down 2 million this month, and 13 percent above 1999. Yields averaged 61.1 bushels per acre, down 0.3 bushel from the last estimate on September 29, but up 3 percent from last year. The November <a href="Crop Production">Crop Production</a> report contained updates on barley since the release of <a href="Small Grains">Small Grains</a> 2000 <a href="Summary">Summary</a> and <a href="Grains Stocks">Grain</a> Stocks, area, yields and production were revised.

## OATS PRODUCTION FORECAST SLIPS

The 2000 oats crop is forecast at 149 million bushels, down 1 million from the last estimate on September 29, but up 3 million from 1999. The forecast yield is down 0.2 bushel from the last estimate, but up 4.6 from last year's 59.6 bushels per acre. Estimated total use is unchanged from last month, and the

smaller supplies will result in lower ending stocks. Prices received by farmers in 2000/01 are expected to average between \$1.05 and \$1.15 per bushel, compared with \$1.05 to \$1.25 last month. Prices for 1999/2000 were \$1.12 per bushel.

# LDPs SUPPORT FEED GRAIN FARMERS' INCOME

The 1996 Farm Act contained key policy tools to assist farmers when market prices are low. The key provisions are the "nonrecourse marketing assistance loans" and "loan deficiency payments" (LDPs). Producers that entered into Production Flexibility Contracts with USDA are eligible to participate in these programs.

As of November 13, 2000, eligible producers collected \$1.2 billion in LDP's covering 3.4 billion bushels of 2000-crop corn or 34 percent of the 2000 crop. The average payment rate was 36 cents per bushel on 437,462 contracts. In 1999, 77 percent of the corn produced received an LDP.

For the 2000 crop, sorghum producers have collected \$67 million in LDPs covering 221 million bushels or 48 percent of the crop. The average payment rate was 30 cents per bushel on 60,526 contracts. In 1999, 83 percent of the sorghum crop received an LDP. For barley, producers have collected \$55 million in LDPs covering 198 million bushels or 62 percent of the crop. The average payment rate was 28 cents per bushel on 38,300 contracts. In 1999, 73 percent of the barley crop received an LDP. Oats producers have collected \$32 million in LDPs covering 106 million bushels or 71 percent of the 2000 crop. The average payment rate was 30 cents per bushel on 55,822 contracts. In 1999, 84 percent of the oats crop received an LDP.

## FOREIGN COARSE GRAIN PRODUCTION FORECAST DOWN SLIGHTLY

Global coarse grain production in 2000/01 is forecast at 859 million tons, down almost 4 million this month, with most of the drop in the United States. Forecast foreign production also declined slightly. Corn production in Eastern Europe dropped 2 million tons, as harvest reports indicate that summer drought damaged the crop more than was expected. Romania, Hungary, and the former Yugoslavia were reduced. However, increased corn production in Ukraine, where harvest conditions were favorable, nearly offset the drop in Eastern Europe.

World coarse grain production in 2000/01 is forecast down 17 million tons from a year earlier, a decline of 2 percent. After reaching a record level in 1996/97, global coarse grain production has declined in 3 of the last 4 years. Relatively low prices have limited the incentive to grow coarse grains in some countries, while adverse weather has also reduced production in several areas such as China, Eastern Europe, and North Africa. In 2000/01 most of the

global production decline has been in corn and sorghum, while barley production rebounded from a very low level the year before. For the past year, barley prices have increased compared with corn prices, and world barley area, which has declined for the last 7 years, was nearly unchanged. However, in 2000/01 barley area continued to decline in the European Union (EU), Eastern Europe, and former Soviet Union.

Global coarse grain consumption is forecast down marginally this month, with a decline of over 1 million tons in Eastern Europe more than offsetting increases elsewhere. However, world coarse grain consumption is expected to grow compared with previous years, reaching a record of 887 million tons. However, the growth is expected to be sluggish. Despite population and income growth, coarse grain consumption, mostly feed use as an input for meat production, is forecast to grow at less than 1 percent in 2000/01. Even with slow consumption growth, consumption is expected to be nearly 28 million tons larger than production, causing a significant drop in expected global stocks.

World coarse grain ending stocks in 2000/01 are forecast at 138 million tons, down more than 3 million tons from last month's forecast, with the drop concentrated in the United States. Global ending stocks are forecast down 17 percent compared with beginning stocks. While in previous months a drop in foreign coarse grain stocks was expected to be partly offset by an increase in U.S. stocks, current forecasts indicate a decline in both U.S. and foreign stocks.

# GLOBAL TRADE FORECAST UP, U.S. 2000/01 BARLEY EXPORTS BOOSTED

World coarse grain trade forecasts for 1999/2000 and 2000/01 were increased marginally this month. For 1999/2000, import forecasts were increased for Mexico and Malaysia because late-season imports were larger than expected. U.S. export forecasts for October/September were increased for corn, sorghum, and barley because of strong shipments reported by Census in August and grain export inspections for September. U.S. sorghum exports in 1999/2000 are the largest in 7 years. Global coarse grain trade in 1999/2000 is expected to be the largest in the decade.

World coarse grain trade projected for 2000/01 was increased this month by 0.5 million tons to 101 million. Imports increased for South Korea and Malaysia because of stronger-than-expected feed use prospects, and for Eastern Europe, where imports will be needed because of reduced production. However, imports projections were reduced for Canada, which put antidumping tariffs on U.S. corn imports west of Ontario; Israel, which is expected to import somewhat more feed wheat and less corn; and for parts of southern Africa, where shipments have been less than expected.

U.S. barley exports increased because of robust sales of feed barley to Saudi Arabia, and steady shipments including malting barley to Japan and Mexico. October/September international marketing year exports increased to 825,000 tons for 1999/2000 and 750,000 for 2000/01. Barley is generally selling at a premium to corn on global markets as two years of drought in North Africa and parts of the Middle East has boosted demand. These regions have a strong preference for barley as feed for sheep and camels. In the United States barley generally sells at a discount to corn because of its lower feed value. Relatively tight barley supplies are expected to limit U.S. exports in 2000/01.

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Table 1--Feed Grains: Marketing year supply and disappearance 1/

Year/ Beg. Qtr. stocks								
Sep-Nov 1,308 Dec-Feb 8,052 Mar-May 5,698 Jun-Aug 3,616		4 11,071 6 8,058 7 5,706 2 3,618	450 434 495 468	1,460	450 465 497 568	2,359 2,089	8,052 5,698 3,616 1,787	
Mkt. yr.1,308	9,759 1	9 11,085	1,846	5,471	1,981	9,298	1,787	1.94
1999/00 Sep-Nov 1,787 Dec-Feb 8,025 Mar-May 5,602 Jun-Aug 3,586		4 11,228 3 8,028 6 5,607 2 3,588	447	1,511	534 468 451 485	2,426	8,025 5,602 3,586 1,715	1.71 1.90 2.05 1.68
Mkt. yr.1,787	9,437 1	5 11,239	1,913	5,673	1,937	9,524	1,715	1.80
2000/01								
Mkt. yr.1,715	10,054 1	0 11,779	1,975	5,850	2,275	10,100	1,679	1.70-2.10
SORGHUM 1998/99 Sep-Nov 49 Dec-Feb 335 Mar-May 222 Jun-Aug 116		0 569 0 335 0 222 0 116	15 15 10 6	178 34 45 5	41 64 51 41	234 113 106 51	335 222 116 65	1.67 1.69 1.73 1.60
Mkt. yr. 49	520	0 569	45	262	197	504	65	1.66
1999/00 Sep-Nov 65 Dec-Feb 348 Mar-May 226 Jun-Aug 127 Mkt. yr. 65 2000/01	 	0 660 0 348 0 226 0 127 0 660	18 18 13 6	229 28 22 6	65 77 64 50 256	99 62	348 226 127 65	1.45 1.58 1.83 1.63
Mkt. yr. 65	463	0 529	50	230	200	480	49	1.55-1.95

Table 1--Feed Grains: Marketing year supply and disappearance, (cont.) 1/

Year/	Beg.	Produc-	- Im-	Supply	FSI	Feed &	Ex-	Total	End.	
BARLEY 1998/99				M						- \$/bu
Jun-Aug Sep-Nov	119 326	352	7 7	479 333	44 39	101 16	8	152 63	326 271	2.03 1.97
Dec-Feb	271		-	277	37	32	7	76	201	1.89
Mar-May	201		9	210	51	12	5	68	142	1.85
Mkt. yr	. 119	352	30	501	170	161	28	360	142	1.98
1999/00			_				_			
Jun-Aug Sep-Nov	142 295	280	6 5	428 300	44 39	79 22	9 10	132 71	295 229	2.18 2.04
Dec-Feb	229		9	239	37	24	7	68	170	2.14
Mar-May	170		7	178	52	10	4	66	111	2.19
Mkt. yr	. 142	280	28	450	172	136	30	338	111	2.13
2000/01										
Jun-Aug	111	318	7	436	44	92	8	145	292	2.35
Mkt. yr	. 111	318	30	459	172	145	40	357	102	2.10-2.40
OATS 1998/99										
Jun-Aug	74	166	28	268	17	89	0.5	106	162	1.15
Sep-Nov	162 143		36 22	198 166	16 14	38 38	0.4 0.5	54 53	143 113	1.08 1.20
Dec-Feb Mar-May	113		22	134	22	31	0.3	53	81	1.23
Mkt. yr	. 74	166	108	348	69	196	1.7	266	81	1.10
1999/00										
Jun-Aug	81	146	22	249	17	84	0.6	101	148	1.05
Sep-Nov Dec-Feb	148 136		34 23	182 159	16 14	30 42	0.3	46 56	136 102	1.08 1.22
Mar-May	102		20	123	21	24	0.7	47	76	1.32
Mkt. yr	. 81	146	99	326	68	180	1.8	250	76	1.12
2000/01										
Jun-Aug	76	149	21	246	17	79	0.4	96	150	1.02
Mkt. yr	. 76	149	100	325	68	180	2.0	250	75	1.05-1.15

Totals may not add due to rounding.

<sup>1/</sup> Corn and sorghum are on a September 1 to August 31 marketing year.

Barley and oats are on a June 1 to May 31 marketing year.

Table 2--Feed and residual use of wheat and coarse grains

Year Beginning September 1		Sorg.	Barley	Oats	Feed Grains		Total grains		Feed/ animal unit
			- Milli	on metri	c tons			Mil.	Tons
1998/99									
Sep-Nov	53.8	4.5	0.3		59.3		57.3		
Dec-Feb			0.7	0.6		0.3			
Mar-May					29.8				
Jun-Aug	20.2	0.1	1.7	1.3	23.3	7.3	30.7		
Mkt. yr.	139.0	6.7	3.0	3.0	151.7	6.5	158.2	88.1	1.80
% Change							-3.4		
1999/00									
Sep-Nov	56.1	5.8	0.5	0.5	63.0	-0.2	62.8		
Dec-Feb	38.4	0.7	0.5	0.7	40.3	0.8	41.1		
Mar-May	26.9	0.6	0.2	0.4	28.1	-0.2	27.8		
Jun-Aug	22.7	0.1	2.0	1.2	26.0	8.8	34.8		
Mkt. yr.	144.1	7.2	3.2	2.8	157.4	9.2	166.6	89.1	1.87
% Change		8.4			3.7			1.2	
2000/01									
Mkt. yr.	148 6	5 8	2.8	2 9	160 1	6.2	166 3	90 1	1.85
% Change						-32.9			

Table 3--Cash feed grain prices

	Corn, No. 2, Yel, Ctrl. IL 1/	No. 2, Yel, Gulf	South Panhandle	No. 2, Yel, Gulf		Barley, No. 3 or better, Malting, Minn. 2/	Oats, No. 2, Heavy white, Minn. 2/
Mkt. yr.	\$/bu	\$/bu	\$/cwt	\$/cwt	\$/bu	\$/bu	\$/bu
96/97 97/98 98/99 99/00 3/	2.74 2.45 1.97 1.86	3.07 2.78 2.35 2.23	5.02 4.72 3.78 3.36	5.03 4.76 3.97 3.79	2.32 1.90 1.23 NQ	3.18 2.50 2.30 NQ	2.03 1.70 1.34 1.26
Monthly: 1999:							
Jun Jul Aug Sep	1.99 1.67 1.84 1.81	2.36 2.12 2.20 2.21	3.61 3.40 3.59 3.39	3.86 3.46 3.77 3.64	NQ NQ NQ NQ	NQ NQ NQ NQ	1.34 1.25 1.20 1.17
2000: Jun Jul Aug Sep 3/	1.83 1.53 1.49 1.58	2.13 1.91 1.91 2.03	3.00 3.37 2.88 3.68	3.60 3.34 3.46 3.75	NQ NQ NQ	NQ NQ NQ NQ	NQ NQ NQ NQ

<sup>1/</sup> Marketing year beginning September 1.

<sup>2/</sup> Marketing year beginning June 1. 3/ Preliminary. NQ = No quote.

Table 4--Selected feed and feed by-product prices

	Soybean meal 44% slv. Decatur, IL 1/	Cotton- seed meal, 41% slv. Memphis	Corn gluten feed, IL pts. 1/	meal,	meal,	dried	midlgs, Kansas City	farm price
				\$/ton				
Mkt. yr 96/97 97/98 98/99 99/00		191.47 150.40 109.86 124.00	93.05 69.65 59.87 52.89	341.50 290.45 234.76 237.31	272.44 192.56 137.32 163.13	142.87 109.76 84.87 82.93	91.18 76.30 54.74 53.13	101.80 107.00 88.10 80.20
Monthly 1999:	:							
Jun Jul Aug Sep	131.70 125.71 135.90 144.06	114.50 115.00 100.65 111.92	57.90 51.75 54.30 55.50	209.50 241.25 252.50 258.13	137.10 133.75 139.61 142.21	87.00 91.67 NQ 88.00	45.70 39.20 44.91 57.64	82.80 83.40 84.90 79.80
2000: Jun Jul Aug Sep 3/	170.18 156.84 151.38 166.88	130.63 131.88 130.50 153.12	48.80 45.25 43.20 46.75	223.75 218.75 211.00 227.50	174.64 173.45 170.95 182.63	76.00 81.00 NQ 73.00	49.00 42.53 37.72 53.88	85.70 84.50 83.90 87.20

Table 5--Corn: Food and industrial uses

		 Glucose and				Cereals & other	Total
Year	HFCS		Starch	Fuel	& Mfg	products	F&I
			M:	illion bus	shels		
1997/98 Sep-Nov Dec-Feb Mar-May Jun-Aug	112.5 134.2	52.6 56.8	62.8 59.7 61.3 62.0	122.2 118.3	32.8	45.5 45.0 46.0 46.0	424.8
Mkt year	512.9	229.2	245.8	481.1	133.0	182.4	1,784.4
1998/99 Sep-Nov Dec-Feb Mar-May Jun-Aug Mkt year  1999/00 Sep-Nov	116.6 140.5 150.2 530.5	48.7 56.2 57.7 219.1	239.8	132.9 138.8 121.8 525.8	32.6 34.1 29.4 127.1	46.4 184.2 46.0	433.8 476.0 466.7 1,826.4
Dec-Feb Mar-May Jun-Aug	141.7 149.2	49.6 57.1 58.4	60.0 63.7 63.8	147.9	34.9	46.0 46.5 46.5	491.9
Mkt year	539.5	221.9	251.1	565.8	129.7	185.0	1,893.0
2000/01							
Mkt year	550.0	230.0	255.0	600.0	130.2	190.0	1,955.2

<sup>1/</sup> Marketing year beginning September 1.
2/ Marketing year beginning May 1. 3/ Preliminary. NQ=No quote.

Table 6--Wholesale corn milling product and by-product prices

	yellow,	Brewers' grits, Chicago	dextrose,		
Mkt. yr. 1/	\$/cwt	\$/cwt	cents/lb	cents/lb	\$/cwt
96/97	16.94	12.85	25.50	13.15	13.83
97/98	15.94	11.85	28.08	7.77	13.55
98/99	15.06	11.00	24.24	8.04	12.28
99/00 2/	15.05	10.91	16.38	9.18	12.39
Monthly 1999:					
Jul	14.72	10.62	16.38	8.45	12.73
Aug	15.12	11.27	16.38	8.45	11.74
Sep	15.28	11.18	16.38	8.45	12.01
Oct	14.89	10.79	16.38	9.25	11.89
2000:					
Jul	14.72	11.07	16.38	9.25	12.76
Aug	14.62	10.52	16.38	9.25	12.04
Sep	14.92	10.82	16.38	9.25	11.71
Oct 2/	15.49	11.39	16.71	8.68	11.95

<sup>1/</sup> Marketing year beginning September 1.

Table 7--U.S. imports by country of origin

Country/region		<b>,</b>	=-	1999/2000		
	мкt. yr.	June-Aug	Mkt. yr.	June-Aug	June-Aug	
OATS			Thousand to	ns		
Canada	1,142	241	1,287	273	303	
Finland	216	54	125	24	0	
Sweden	443	182	276	79	59	
Total 1/	1,856	477	1,703	376	362	
BARLEY, MALTING						
Canada	567	103	543	120	137	
Total 1/	567	103	543	120	137	
BARLEY, OTHER 2/						
Canada	81	54	60	6	20	
Total 1/	81	54	60 	6 	20	

<sup>1/</sup> Totals may not add due to rounding.

Source: Bureau of the Census

<sup>2/</sup> Preliminary.

<sup>3/</sup> Bulk-industrial, unmodified.

<sup>2/</sup> Mainly consists of barley for feeding and also includes seed barley.

Table 8--U.S. feed grain exports by selected destinations 1/

Country/region		 1997/98	19	 998/99	1999/2000	
Country/region	Mkt. yr.	SeptAug.	Mkt. yr.	SeptAug.	SeptAug.	
CORN						
Japan	14,581		15,224		15,149	
Taiwan	3,801		4,365		5,036	
Mexico	4,116		5,387		4,832	
Egypt	1,808		3,586		3,790	
S. Korea	3,593		6,462		3,134	
Colombia Saudi Arabia	1,175 971		1,512 1,182		1,782 1,164	
Venezuela	655		1,182		1,104	
Algeria	861		955		1,042	
Dominican Republic			777		1,003	
Canada	1,423		867		982	
Turkey	379		692		874	
Israel	148		399		695	
Iran	0		0		611	
Morocco	350		599		604	
Syria Chile	286 147		354 486		603 542	
Tunisia	156		441		519	
Sub-Saharan Africa			441		511	
Former USSR	23		405		491	
Peru	253		674		458	
EU	147		192		141	
China	212		259		58	
East Europe	19		12		35	
Others	2,032		3,667		3,967	
Total	38,117		50,228		49,098	
SORGHUM						
Mexico	3,222		3,103		4,824	
Japan	1,650		1,362		1,123	
EU Others	204 259		197 237		181 239	
Total	5.334		4.899		6.366	
	Mkt. yr.	1998/99 June-Aug. 	Mkt. yr.	June-Aug.	2000/2001 June-Aug.	
Japan	443			123		
Mexico Jordan	94	27 0	104 50	23 0	21 0	
Saudi Arabia	0	0	0	0	40	
Taiwan	Ő	Ő	5	Ö	24	
Other	79	8	107	51	33	
Total	615	169	657	198	183	

<sup>1/</sup> Totals may not add due to rounding. Source: Bureau of the Census