FEED OUTLOOK

United States Department of Agriculture

FDS-1299

Economic Research Service

Approved by the World Agricultural Outlook Board

December 14, 1999

HIGHLIGHTS

- Feed Grain Use Up Slightly from Last Month
- Corn Feed and Residual Increased from Last Month
- Sorghum Exports Raised from Last Month, Feed and Residual Lowered
- Global Ending Stocks Decline, Small Increases in Forecast Coarse Grain Consumption and Trade

FEED GRAIN SUPPLY INCREASES FROM LAST MONTH

U.S. feed grain production in 1999 is forecast at 266 million metric tons, the same as a month ago but down 2 percent from 1998. Feed grain supply in 1999/2000 is forecast at 319.9 million tons, up very slightly from last month, and up 2 percent from 1998/99. Supplies are up from last year because of larger beginning stocks. Total feed grain use is projected at 263 million tons, up 1.2 million from last month and up 2.7 million from 1998/99.

On a September-August marketing year, feed and residual use for the four feed grains plus wheat in 1999/2000 is up nearly 1 percent from last month and up 2 percent from last year. The projected index of grain consuming animal units (GCAUs) for 1999/2000 is 89.4 million units, unchanged from last month but up 1 percent from 1998/99. Feed and residual used per GCAU in 1999/2000 is 1.82 tons, up 1 percent from 1998/99, but down 3 percent from 1997/98. In the index components for 1999/2000, GCAUs for dairy and hogs are down and those for cattle and poultry are up. Increased cattle on feed on November 1, 1999, plus reduced prospects for wheat pasture, suggest cattle will go on feed rather than stay on pasture.

CORN FEED AND RESIDUAL FORECAST RAISED FROM LAST MONTH

U.S. corn supplies in 1999/2000 are forecast at 11,349 million bushels, up 5 million from last month and up 2 percent from 1998/99. Imports were raised slightly this month because of the increased corn crop in Canada. Corn use in 1999/2000 is up from last month, because of increased feed and residual use. Forecast feed and residual use was raised because of continued strong cattle movement into feedlots and reduced feed and residual use for sorghum and barley. Increased use lowered corn ending stocks 2 percent from last month but stocks are expected up 11 percent from last year. The forecast price for 1999/2000 is $1.60-$2.00 per bushel, unchanged from last month. In 1998/99, the season-average price received by farmers was $1.94.

SORGHUM EXPORTS INCREASED THIS MONTH

Sorghum supplies in 1999/2000 are unchanged from last month, up 16 percent from 1998/99. With reduced corn exports to Mexico, exports of sorghum are expected to increase. In 1999/2000, forecast exports are up 10 million bushels from last month. Feed and residual is expected to be lower than last month, reduced by the amount of increased exports. Forecast feed and residual use is up 20 percent from 1998/99’s 262 million bushels. In the 1999/2000 marketing year, prices received by farmers for sorghum are expected to average $1.35 to $1.75, the same as last month. The midpoint of the 1999/2000 sorghum price is 86 percent of the midpoint of the expected corn price. The season average price for 1998/99 was $1.66 per bushel, which was 86 percent of the corn price.

BARLEY IMPORTS LOWER

Forecast barley imports in 1999/2000 were lowered 5 million bushels this month, in line with imports to date. Forecast barley supplies are down this month, and 10 percent below 1998/99’s 501 million bushels. Feed and residual was reduced to reflect the reduced supplies this month, leaving ending stocks unchanged. Prices received by farmers in 1999/2000 are expected to average between $1.90 and $2.20, compared with $1.80 to $2.20 last month. Prices for 1998/99 averaged $1.98 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.

The nonrecourse marketing assistance loans provide interim financing to eligible producers of feed grains and other commodities covered by the program. Producers pledge their feed grains as collateral and obtain a loan equivalent to the loan rate established in their county by the Farm Service Agency of USDA. The loan proceeds can cover short term cash needs. As of December 13, 1999, feed grain producers had outstanding loans on 692 million bushels of 1999-crop feed grains. The value of the outstanding loans totaled $1,268 million, yielding an average loan value of $1.84 per bushel for corn, $1.71 per bushel for sorghum, $1.69 for barley, and $1.08 for oats.

The loans may be forfeited to the Commodity Credit Corporation at maturity or repaid at the loan repayment rate at or before maturity. The loan repayment rate may actually be less than the loan rate (plus interest) if the local price--called the posted county price (PCP)--falls below the local loan rate. The PCP--calculated each day the Federal Government is open--is based on terminal market prices and a fixed differential to each county, largely reflecting transportation and other marketing factors. When a farmer repays the loan at a lower PCP, the difference between the loan rate and the PCP is called a "marketing loan gain." If the PCP is under the county loan rate on the day the producer repays the loan, accrued interest on the loan is waived.

If the PCP is below the county loan rate, eligible producers may opt for an LDP in lieu of securing a loan. The LDP rate is the amount by which the county loan rate exceeds the PCP on the date the application is made. The feed grain cannot be placed under loan once an LDP is paid. If producers take the LDPs and immediately sell their crop and if the PCP accurately reflects local prices, they effectively receive a per-unit revenue equal to the loan rate, partly from the market and partly from the government. After an LDP is accepted, the farmer can sell the crop and avoid storage expense or hold it in the expectation of a price rally later in the marketing season.

As of December 13, 1999, eligible producers collected $1,363 million in LDP's covering 4,667 million bushels of 1999-crop corn or about 49 percent of the 1999 crop. The average payment rate was 29 cents per bushel on 617,468 contracts. In 1998, 58 percent of the corn produced received an LDP.

For the 1999 crop, sorghum producers have collected $115 million in LDPs covering 372 million bushels or about 62 percent of the crop. The average payment rate was 31 cents per bushel on 91,178 contracts. In 1998, 67 percent of the sorghum crop received an LDP. For barley, producers have collected $32 million in LDPs covering 170 million bushels or about 60 percent of the crop. The average payment rate was 19 cents per bushel on 34,706 contracts. In 1998, 73 percent of the barley crop received an LDP. Oats producers have collected $25 million in LDPs covering 107 million bushels or about 73 percent of the 1999 crop. The average payment rate was 23 cents per bushel on 54,054 contracts. In 1998, 63 percent of the oats crop received an LDP.

WORLD COARSE GRAIN ENDING STOCKS FORECAST FOR 1999/2000 REDUCED SLIGHTLY

Several minor changes in consumption and trade accumulated this month to reduce projected 1999/2000 global coarse grain stocks 1.0 million tons. However, ending stocks are still forecast to increase by 1 percent compared to beginning stocks. Prices remain low because stocks are increasing even though world production is forecast down 2 percent from a year ago, mostly because of smaller corn crops in China and the United States.

The largest increase this month in coarse grain consumption was in the United States, with foreign consumption practically unchanged. There are reduced consumption prospects for Brazil because of a lower corn crop, in Russia because of a smaller barley crop, and in Egypt, where the pace of corn imports has not been as strong as expected. These reductions offset increased consumption forecast this month for Canada, Malaysia, Mexico, Chile, Saudi Arabia, Taiwan, and others.

The forecast for world coarse grain trade in 1999/2000 increased 0.8 million tons this month. Increases of 0.2 to 0.3 million tons for Taiwan, Thailand, Saudi Arabia, Malaysia, Chile, and other smaller increases more than offset the decline for Egypt. Continued low prices are likely contributing to marginally larger imports in many countries. However, world trade in 1999/2000 (on an October/September international marketing year, excluding intra-EU trade) is forecast at 94.8 million tons, 1.1 million lower than a year earlier, mostly because of larger crops and reduced imports in Mexico, the former Soviet Union, and Africa. Estimated 1998/99 trade was reduced this month by 0.6 million tons as exporters' data indicated lower than expected shipments, especially by Argentina.

U.S. SORGHUM EXPORTS UP ON INCREASED SHIPMENTS TO MEXICO

U.S. sorghum exports estimated for 1998/99 and forecast for 1999/2000 (October/September international marketing year) increased this month because of larger than expected shipments to Mexico. Census data indicated larger shipments during September than indicated by Inspections, boosting the 1998/99 estimate to 5.2 million tons, up slightly from the previous year. Another small increase is expected in 1999/2000 because the price of sorghum compared with corn in the U.S. Southwest is expected to remain attractive to Mexican buyers. Also with increased local corn production, Mexican feed grain importers may find it difficult to get additional corn import quotas, making them even more likely to turn to sorghum.


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

Year/ Qtr.	Beg. stocks	Produc- tion	Im- ports	Supply	FSI	Feed & resid.	Ex- ports	Total disp.	End. stks.	Farm price
CORN	Million bushels									$/bu
1997/98										
Sep-Nov	883	9,207	2	10,092	429	2,036	380	2,845	7,247	2.53
Dec-Feb	7,247	---	1	7,248	418	1,510	380	2,308	4,940	2.55
Mar-May	4,940	---	4	4,944	464	1,089	350	1,904	3,040	2.45
Jun-Aug	3,040	---	2	3,042	470	870	394	1,734	1,308	2.12
Mkt. yr.	883	9,207	9	10,099	1,782	5,505	1,504	8,791	1,308	2.43
1998/99										
Sep-Nov	1,308	9,761	4	11,073	444	2,127	450	3,021	8,052	1.90
Dec-Feb	8,052	---	6	8,058	427	1,467	465	2,359	5,698	2.04
Mar-May	5,698	---	7	5,706	489	1,103	497	2,089	3,616	2.04
Jun-Aug	3,616	---	2	3,618	462	791	568	1,822	1,796	1.84
Mkt. yr.	1,308	9,761	19	11,088	1,822	5,489	1,981	9,291	1,796	1.94
1999/00										
Mkt. yr.	1,796	9,537	15	11,349	1,880	5,550	1,925	9,355	1,994	1.60-2.00
SORGHUM										
1997/98										
Sep-Nov	47	634	0	681	18	239	49	307	374	2.26
Dec-Feb	374	---	0	374	18	38	83	139	235	2.24
Mar-May	235	---	0	235	12	71	55	139	96	2.16
Jun-Aug	96	---	0	96	6	17	24	47	49	2.08
Mkt. yr.	47	634	0	681	55	365	212	632	49	2.21
1998/99										
Sep-Nov	49	520	0	569	15	178	41	234	335	1.68
Dec-Feb	335	---	0	335	15	34	64	113	222	1.70
Mar-May	222	---	0	222	10	45	51	106	116	1.72
Jun-Aug	116	---	0	116	6	5	41	51	65	1.61
Mkt. yr.	49	520	0	569	45	262	197	504	65	1.66
1999/00										
Mkt. yr.	65	596	0	661	55	315	210	580	81	1.35-1.75

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

Year/ Qtr.	Beg. stocks	Produc- tion	Im- ports	Supply	FSI	Feed & resid.	Ex- ports	Total disp.	End. stks.	Farm price
BARLEY	Million bushels									$/bu
1997/98										
Jun-Aug	109	360	12	482	44	87	24	155	327	2.31
Sep-Nov	327	---	7	334	39	12	39	90	244	2.45
Dec-Feb	244	---	8	252	37	29	6	72	180	2.42
Mar-May	180	---	13	193	53	16	5	74	119	2.26
Mkt. yr.	109	360	40	510	172	144	74	390	119	2.38
1998/99										
Jun-Aug	119	352	7	479	44	101	8	152	326	2.02
Sep-Nov	326	---	7	333	39	16	8	63	271	1.97
Dec-Feb	271	---	6	277	37	32	7	76	201	1.90
Mar-May	201	---	9	210	51	12	5	68	142	1.84
Mkt. yr.	119	352	30	501	170	161	28	360	142	1.98
1999/00										
Jun-Aug	142	282	6	429	44	81	9	134	295	2.00
Mkt. yr.	142	282	25	449	172	120	30	322	127	1.90-2.20
OATS										
1997/98										
Jun-Aug	67	167	19	253	24	74	0.4	98	155	1.62
Sep-Nov	155	---	38	193	22	26	0.7	49	144	1.54
Dec-Feb	144	---	26	170	21	38	0.5	59	111	1.59
Mar-May	111	---	15	127	28	24	0.5	53	74	1.60
Mkt. yr.	67	167	98	332	95	161	2.1	258	74	1.60
1998/99										
Jun-Aug	74	166	28	268	24	82	0.5	106	162	1.15
Sep-Nov	162	---	36	198	22	32	0.4	54	143	1.08
Dec-Feb	143	---	22	166	21	32	0.5	53	113	1.20
Mar-May	113	---	22	134	28	25	0.3	53	81	1.23
Mkt. yr.	74	166	108	348	95	170	1.7	266	81	1.10
1999/00										
Jun-Aug	81	147	22	250	24	78	0.6	102	147	1.10
Mkt. yr.	81	147	100	328	96	165	2.0	263	65	1.05-1.15

Totals may not add due to rounding.
1/ 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	Corn	Sorg.	Barley	Oats	Feed Grains	Wheat	Total grains	Animal Units	Feed/ animal unit
	Million metric tons							Mil.	Tons
1997/98									
Sep-Nov	51.7	6.1	0.3	0.5	58.5	-3.1	55.5		
Dec-Feb	38.3	1.0	0.6	0.6	40.6	0.0	40.6		
Mar-May	27.7	1.8	0.3	0.4	30.2	0.3	30.5		
Jun-Aug	22.1	0.4	2.2	1.3	26.0	11.6	37.6		
Mkt. yr.	139.8	9.3	3.4	2.8	155.3	8.8	164.1	87.9	1.87
% Change	3.9	-29.3	-5.6	7.3	0.9	14.5	1.5	3.1	-1.5
1998/99									
Sep-Nov	54.0	4.5	0.3	0.6	59.4	-2.0	57.4		
Dec-Feb	37.3	0.9	0.7	0.5	39.4	0.3	39.7		
Mar-May	28.0	1.2	0.3	0.4	29.9	0.9	30.8		
Jun-Aug	20.1	0.1	1.8	1.2	23.2	7.6	30.8		
Mkt. yr.	139.4	6.7	3.1	2.7	151.8	6.9	158.7	88.5	1.79
% Change	-0.3	-28.1	-10.3	-3.6	-2.2	-22.1	-3.3	0.7	-4.0
1999/00									
Mkt. yr.	141.0	8.0	2.7	2.7	154.3	8.0	162.4	89.4	1.82
% Change	1.1	20.1	-12.6	-0.7	1.6	17.1	2.3	1.0	1.3

Table 3--Cash feed grain prices

	Corn, No. 2, Yel, Ctrl. IL 1/	Corn, No. 2, Yel, Gulf ports 1/	Sorghum, No. 2, Yel Texas South Panhandle 1/	Sorghum, No. 2, Yel, Gulf ports 1/	Barley, No. 2, feed, Duluth 2/	Barley, No. 3 or better, Malting, Minn. 2/	Oats, No. 2, Heavy white, Minn. 2/
Mkt. yr.	$/bu	$/bu	$/cwt	$/cwt	$/bu	$/bu	$/bu
95/96	3.91	4.30	7.30	7.19	2.67	3.69	2.28
96/97	2.74	3.07	5.02	5.03	2.32	3.18	2.03
97/98	2.45	2.78	4.72	4.76	1.90	2.50	1.70
98/99 3/	1.97	2.35	3.78	3.97	1.23	2.30	1.34
Monthly:							
1998:							
Jul	2.16	2.55	4.70	4.33	1.23	NQ	1.42
Aug	1.86	2.24	4.97	4.13	NQ	2.30	1.21
Sep	1.78	2.18	4.81	3.84	NQ	NQ	1.30
Oct	1.94	2.43	4.91	4.00	NQ	NQ	1.29
1999:							
Jul	1.67	2.12	4.53	3.46	NQ	NQ	1.25
Aug	1.84	2.20	4.15	3.77	NQ	NQ	1.20
Sep	1.81	2.21	3.39	3.64	NQ	NQ	1.17
Oct	1.72	2.17	3.30	3.55	NQ	NQ	1.20

1/ Marketing year beginning September 1.
2/ 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 1/	Corn gluten feed, IL pts. 1/	Corn gluten meal, IL pts. 1/	Meat & bone meal, Central U.S. 1/	Dists.' dried grains, Lawrence-burg, IN 1/	Wheat midlgs, Kansas City 1/	Alfalfa farm price 2/
	$/ton							
Mkt. yr.								
95/96	217.27	186.12	116.47	319.35	222.07	151.37	118.08	87.20
96/97	260.37	191.47	93.05	341.50	272.44	142.87	91.18	101.80
97/98	186.55	150.40	69.65	290.45	192.56	109.76	76.30	107.00
98/99	130.56	109.86	59.87	234.72	137.32	85.77	54.74	91.00
Monthly:								
1998:								
Jul	173.30	145.60	58.75	252.50	171.25	86.00	67.84	93.40
Aug	135.70	130.30	57.50	245.00	156.80	86.00	53.40	90.20
Sep	126.90	115.60	51.50	210.00	133.40	NQ	43.90	87.10
Oct	129.40	106.50	56.90	227.50	141.30	75.00	49.00	86.90
1999:								
Jul	125.71	115.00	51.75	241.25	133.75	91.67	39.20	82.00
Aug	135.90	100.65	54.30	252.50	139.61	NQ	44.91	81.50
Sep	144.06	111.92	55.50	258.13	142.21	88.00	57.64	77.30
Oct	147.19	111.83	58.38	265.00	150.17	88.00	54.83	76.00

1/ Marketing year beginning September 1.
2/ Marketing year beginning May 1. 3/ preliminary. NQ=No quote.

Table 5--Corn: Food, and industrial uses

Year	HFCS	Glucose and dex.	Starch	Alcohol: Fuel	Alcohol: Bev. & Mfg	Cereals & other products	Total F&I
	Million bushels						
1997/98							
Sep-Nov	122.8	63.4	59.6	116.1	33.2	34.0	429.1
Dec-Feb	116.8	56.2	56.7	122.2	32.8	33.6	418.3
Mar-May	139.4	60.7	58.3	118.3	33.5	34.4	444.5
Jun-Aug	153.4	64.7	58.9	124.6	33.5	34.4	469.4
Mkt year	532.3	244.9	233.5	481.1	133.0	136.5	1,761.2
1998/99							
Sep-Nov	127.6	60.5	57.8	132.4	31.1	34.5	443.8
Dec-Feb	120.8	52.0	54.7	132.9	32.6	34.1	427.1
Mar-May	145.4	60.0	57.1	138.8	34.1	34.8	470.1
Jun-Aug	155.4	61.6	58.2	121.8	29.4	34.8	461.2
Mkt year	549.3	234.1	227.8	525.8	127.1	138.2	1,802.2
1999/00							
Mkt year	565.0	240.0	235.0	550.0	129.9	140.0	1,859.9

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

	Corn meal, yellow, New York	Brewers' grits, Chicago	Sugar, destrose, Midwest	HFCS, 42% tank cars, Midwest	Corn starch, fob Midwest 3/ 4/
	$/cwt	$/cwt	cents/lb	cents/lb	$/cwt
Mkt. yr. 1/					
95/96	17.79	14.21	25.50	13.01	15.98
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 2/	15.06	11.00	24.24	8.04	12.28
Monthly					
1998:					
Aug	14.62	10.52	30.65	7.05	12.67
Sep	14.58	10.48	30.65	7.14	11.92
Oct	14.89	10.99	30.65	7.40	11.71
Nov	15.07	10.97	30.65	7.65	12.10
1999:					
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	10.75	16.38	9.25	11.89
Nov 2/	10.75	10.75	10.75	10.75	11.65

1/ Marketing year beginning September 1.
2/ Preliminary. 3/ Revised.
4/ Bulk-industrial, unmodified.

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

Country/region	1997/98 Mkt. yr.	1997/98 Jun - Sep	1998/99 Mkt. yr.	1998/99 Jun - Sep	1999/2000 Jun - Sep
	Thousand tons				
OATS					
Canada	1,282	546	1,142	549	517
Finland	161	25	216	105	24
Sweden	176	22	443	191	79
Total 1/	1,696	593	1,856	846	620
BARLEY, MALTING					
Canada	733	241	567	124	129
Total 1/	733	241	567	124	129
BARLEY, OTHER 2/					
Canada	112	59	81	57	8
Total 1/	143	59	81	57	8

1/ Totals may not add due to rounding.
2/ Mainly consists of barley for feeding, and also includes seed barley.

Source: Bureau of the Census

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

Country/region	1997/98 Mkt. yr.	1997/98 Sept.	1998/99 Mkt. yr.	1998/99 Sept.	1999/2000 Sept.
CORN					
Japan	14,581	1,534	15,110	1,059	1,379
S. Korea	3,593	297	6,462	208	527
Mexico	4,116	229	5,387	486	689
Taiwan	3,801	444	4,365	174	346
Egypt	1,808	216	3,159	359	275
Colombia	1,175	83	1,512	119	104
Venezuela	655	53	1,288	49	89
Saudi Arabia	971	110	1,182	68	60
Algeria	861	105	955	73	65
Canada	1,423	124	867	99	135
Dominican Republic	644	66	777	43	67
Turkey	379	28	692	3	0
Peru	253	0	674	117	78
Morocco	350	28	592	0	26
Chile	147	0	486	0	40
Former USSR	23	22	405	0	0
China	212	0	204	0	58
South Africa	0	0	143	0	48
Other Sub-Saharan	336	0	298	25	35
EU	147	1	192	31	0
East Europe	19	0	12	0	0
Others	2,623	260	5,464	266	816
Total	38,117	3,600	50,228	3,180	4,838
SORGHUM					
Mexico	3,222	144	3,103	205	397
Japan	1,650	252	1,362	57	175
Others	463	49	433	12	2
Total	5,334	444	4,899	274	574

	1997/98 Mkt. yr.	1997/98 Jun-Sep	1998/99 Mkt. yr.	1998/99 Jun-Sep	1999/2000 Jun-Sep
BARLEY					
Saudi Arabia	922	515	0	0	0
Israel	0	0	0	0	0
Jordan	53	0	0	0	0
Japan	290	149	422	216	183
Mexico	124	39	94	30	31
Taiwan	94	60	0	0	0
Other	135	72	99	36	53
Total	1,617	834	615	283	267

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