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# **Feed Outlook**

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# Larger Ending Stocks and Declining Prices Are Expected for the 2003/04 Feed Grains Market

#### Contents

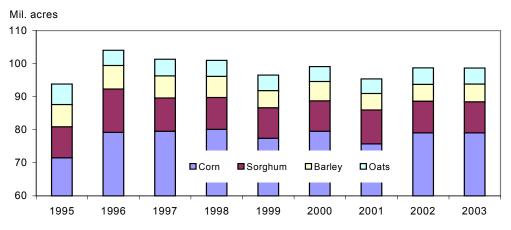
**Domestic Outlook** Feed Grains Feed and Residual Corn Food, Seed & Ind. Sorghum Barley & Oats Hav Intl. Outlook **Coarse Grains** Consumption Trade **Contacts & Links** Tables Feed Grains Feed & Residual **Grain Prices By-product Prices** Food & Industrial Milling Products U.S. Imports U.S. Exports Web Sites WASDE Grain Circular **Briefing Room** 

The next release is June 13, 2003

Approved by the World Agricultural Outlook Board. This report summarizes initial U.S. Department of Agriculture (USDA) supply and demand projections and U.S. price prospects for the 2003/04 marketing year. Since planting is still underway in the Northern Hemisphere and the estimates make an assumption of normal future weather in the marketing year, these projections are highly tentative. U.S. supplies are expected to increase 5 percent for corn, 39 percent for sorghum, 17 percent for barley, and 2 percent for oats. Utilization is also expected to increase but at a slower rate than supply. Because of this, stocks will increase and prices will decline for all of the feed grains in the 2003/04 marketing season.

Despite record world coarse grains production, global coarse grains consumption in 2003/04 is projected larger than production for the fifth consecutive year. World coarse grains stocks are expected to decline to 135 million tons, the lowest in 20 years. However, the drop in stocks is concentrated in China, down 12 million tons, and the former Soviet Union, down almost 5 million. Production, exports, and stocks are expected to increase in the United States, Canada, and Australia.

# Figure 1 Planted area for the four feed grains



Source: National Agricultural Statistics Service, USDA.

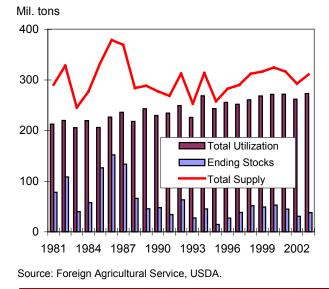
## Feed Grain Production Up 33 Million Tons

Total feed grain production for 2003/04 is projected at 278.1 million tons, up more than 33 million tons from the previous marketing year. Production for all four of the feed grains is expected to be up in 2003/04. The increase in 2003/04 feed grain production stems from increases in both harvested area and yield, which are forecast at 87.2 million acres and 3.19 tons per acre, respectively. Harvested area projections are based on planting intentions and average harvested area to planted area relationships, while projected yields are derived from a simple linear trend. Beginning 2003/04 feed grain stocks are projected at 30.4 million tons, down from 45 million the previous year, leaving total supply up 6 million tons at 311 million.

Total feed grain utilization is expected to increase in 2003/04 due to increases in both domestic use and exports. Feed grain exports are forecast at nearly 54 million tons compared with 46.4 million in 2002/03. Corn and sorghum exports are expected to rise substantially in 2003/04 while barley exports are unchanged and oats exports are down. Domestic use is up 3.5 million tons to 219.1 million tons, due to increases in food, seed, and industrial use, which is now forecast at 66.6 million tons. Ending feed grain stocks are projected at 37.9 million tons compared with 30.4 million tons in 2002/03, and declining prices are projected for all feed grains.

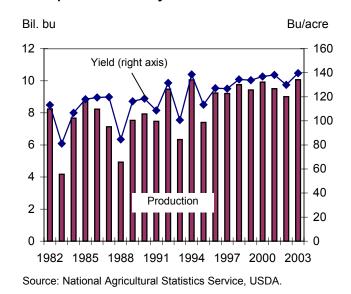
#### Figure 2





#### Economic Research Service, USDA

#### Figure 3 Corn production and yield



# *Corn Exports Lowered 50 Million Bushels in 2002/03*

The only changes made for the 2002/03 marketing year were declines in corn and sorghum exports and increases in barley and oats exports. Feed grain exports for 2002/03 are forecast as follows:

- Corn 1,625 million bushels
- Sorghum 180 million bushels
- Barley 25 million bushels

Point season-average farm price estimates for 2002/03 were also made for barley and oats, which are now \$2.73 and \$1.81, respectively.

# Feed and Residual Up Fractionally From 2002/03

The 2003/04 feed and residual use for the four feed grains plus feed wheat is projected at 157.4 million tons, up fractionally from the previous marketing year. Feed and residual use per grain consuming animal unit (GCAU) is projected at 1.816 tons in 2003/04, up from 1.782 tons the previous year. Total GCAUs are projected to be down about 1 percent to 86.7 million, the lowest since 1996/97. GCAUs are down for all of the major livestock categories except poultry.

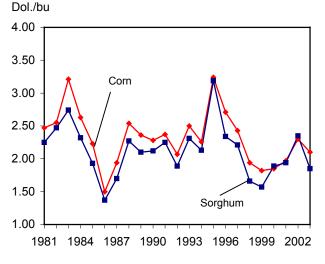
The following is a breakdown of animal production estimates for calendar year 2004:

- Beef production 25.7 billion pounds, down 2 percent from 2003
- Pork production 19.3 billion pounds, down 1 percent from 2003
- Poultry 39 billion pounds, up 1.6 percent from 2003
- Egg production 7.3 billion dozen, up 1 percent from 2003
- Milk production 172.8 billion gallons, up 1 percent from 2003

### Corn Production Projected To Exceed 10 Billion Bushels in 2003/04

The 2003/04 corn crop is projected at a record 10,060 million bushels, up from 9,008 million the previous year. This change comes from a 4-percent increase in harvested area (at 72 million acres) and a record yield at 139.7 bushels per acre. The area estimate is based on the March *Prospective Plantings* report and the next survey-based update of planted area will be released on June 30 in the National Agricultural Statistics Service *Acreage* report. As of May 11, 2003, corn plantings are 64 percent completed compared with the 5-year average of 67 percent. Harvested acres are projected by using relationships between planted and harvested acres for 1999-2001. Projected yield is derived from a simple linear trend fit over the 1960-2001 period.

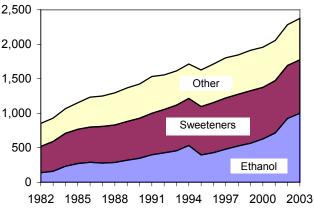




Annual average farm price for corn and sorghum

#### Figure 5 Food, seed, and industrial use of corn





Note: Other includes starch, beverage alcohol, cereals and other products, and seed. Source: Economic Research Service, USDA.

Beginning 2003/04 corn stocks are projected at 1,059 million bushels compared with 1,569 million bushels the previous year. Total corn supply is 11,129 million bushels, up 510 million bushels from 2002/03.

Total corn utilization in 2003/04 is projected at a record 9,825 million bushels, up from 9,560 million the previous year. This year-to-year change stems from increases in food, seed, and industrial (FSI) use and exports that more than offset a decrease in feed and residual use. FSI use is forecast to increase 90 million bushels to a record 2,375 million bushels, largely the result of increased ethanol production. Exports are projected up 225 million bushels because of less competition from foreign corn exporters and reduced global feed wheat supplies. Feed and residual use is down 50 million bushels in 2003/04 because of a decline in cattle on feed and increased competition from other feed grains.

Ending corn stocks for 2003/04 are projected at 1,304 million bushels. These ending stocks are up 23 percent from the previous year but still below the 5-year average of 1,612 million bushels. The stocks-to-use ratio for 2003/04 is forecast at 13.3 percent and the initial season-average farm price is projected at \$1.90-\$2.30 per bushel compared with \$2.25-\$2.35 the previous year.

Source: National Agricultural Statistics Service, USDA.

# Food, Seed, and Industrial Use To Continue Growing

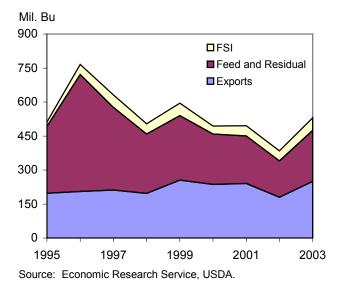
Food, seed, and industrial use in 2003/04 is expected to increase nearly 4 percent from a year earlier and equal to 21 percent of total supplies, down from 22 percent in 2002/03. High- fructose corn syrup use of corn is projected to increase almost 1 percent from the 548 million bushels expected to be used in 2002/03.

Glucose and dextrose use in 2002/03 are expected to be down from the previous year, but are expected to rebound in 2003/04. Starch use of corn in the first half of 2002/03 was up 5 percent from the year earlier but for all of 2002/03, starch use is expected to be up nearly 4 percent from 2001/02. Corn used to produce starch may increase 2 percent from the expected use in 2002/03.

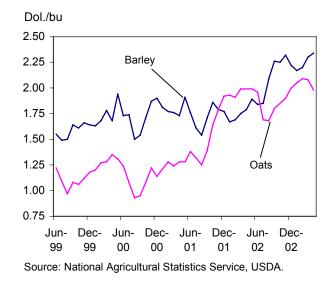
Corn used for ethanol in 2003/04 is projected to increase 8 percent following a 30-percent gain in 2002/03. Monthly ethanol production reported by the Department of Energy was record-high at 177,000 barrels per day in January 2003, helping boost firsthalf 2002/03 to a record 1,485 million gallons. This ethanol production reflects higher use of capacity and the new plants that have been added in the last year to take advantage of various State-level ethanol production incentives.

The Federal Bioenergy Program also provides incentives to increase production of ethanol and biodiesel. On May 7, 2003, Secretary Ann Veneman

#### Figure 6 Sorghum utilization



#### Figure 7 Barley and oats prices



announced that the fiscal year (FY) 2003 Bioenergy Program signup will begin May 7 and end June 6 for producers who expect to have eligible production during October 1, 2002-September 30, 2003. The Secretary can use up to \$115.5 million for the FY 2003 program. For FY 2004-2006, the Bioenergy Program makes \$150 million available per fiscal year to producers who increase their production of bioenergy from eligible commodities compared with production in the previous year. Participating producers are reimbursed for part of their costs of eligible commodities used to increase bioenergy production. Participating biodiesel producers, under the new announced provisions, will receive reimbursements for eligible commodities used for all biodiesel production and not just the increase. In FY 2001, actual payments were \$40.7 million and for FY 2002, payments were \$78.7 million.

# Sorghum Supply and Use Expected To Increase in 2003/04

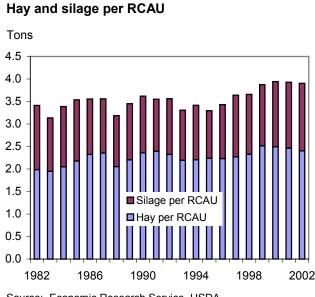
Sorghum production is forecast at 553 million bushels, up 183 million from the drought-reduced crop of a year earlier. Increased harvested area (based on the March Prospective Plantings report and average harvest to planting ratios) and higher yields (based on trend yields) are behind this year-to-year change. Harvested area and yield are projected at 8.2 million acres and 67.8 bushels per acre, up 852,000 acres and 17.1 bushels per acre, respectively. Beginning stocks are down 15.2 million bushels, leaving total supply at 598.7 million bushels, the largest since 1999/2000.

Total sorghum use is projected at 530 million bushels, up from 385 in 2002/03. Feed and residual use, FSI, and exports are expected to show year-to-year gains. Feed and residual is projected at 225 million bushels, up from 160 million the previous year. FSI is up 10 million bushels to 55 million. Sorghum exports are projected at 250 million bushels compared with 180 million a year earlier.

The larger crop will more than offset increased sorghum use, and stocks are expected to build significantly in 2003/04. Ending stocks for 2003/04 are projected at 68.7 million bushels, up from 45.7 million a year earlier and the largest since 1994/95. The stocks-to-use ratio is forecast at 13 percent, and prices are expected to decline to \$1.65-\$2.05 per bushel.

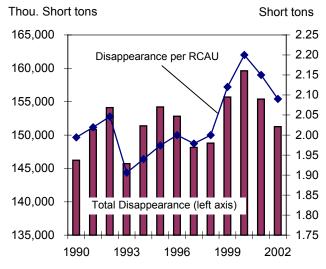
### Barley Production To Increase More Than 30 Percent in 2003/04

Barley production in 2003/04 is forecast at 300 million bushels, up from 226.9 million the previous marketing year. This change is caused by an increase in harvested area as well as a record yield. Harvested area and yield are 4.8 million acres and 62.8 bushels per acre. Beginning stocks are projected at 66.7 million bushels and imports are up 10 million bushels to 30 million. Therefore, total supply is expected to



#### Source: Economic Research Service, USDA.

#### Figure 8 Hay disappearance per RCAU



Source: National Agricultural Statistics Service, USDA.

total 396.7 million bushels, up 17 percent from the previous year.

Domestic barley use is expected to increase in 2003/04, the result of a 25-million-bushel increase in feed and residual use to 100 million bushels. Food, seed, and industrial use and exports are unchanged from 2002/03 at 173 million bushels and 25 million bushels, respectively. These are the lowest exports since 1985/86 when 20 million bushels were exported. Total barley utilization in 2003/04 is projected at 298 million bushels, the largest since 2000/01.

Barley ending stocks are up 32 million bushels to 98.7 million and the stocks-to-use ratio is the largest since 1998/99. Greater feed grain supplies in 2003/04 are expected to put downward pressure on prices, which are forecast at \$2.15-\$2.55 per bushel compared with \$2.73 a year earlier.

## Oats Production To Increase in 2003/04

The 2003/04 oats crop is projected at 135 million bushels, up from 119.1 the previous year. This change is caused by an increase in both harvested area and yield. Harvested area (based on the March *Prospective Plantings* report) and yield (based on trend yields) are 2.2 million acres and 61.3 bushels per acre, respectively. Beginning stocks are down 8 percent to 57.8 million bushels due to the relatively tight supplies of the previous marketing year. Imports

Figure 9

are projected at 95 million bushels, down 5 million from a year earlier. Total supply is projected at 287.8 million bushels, up 2 percent from 2002/03 but still below the 5-year average of 314.7 million bushels.

Total oats utilization in 2003/04 is expected to be virtually unchanged from the previous year at 225 million bushels. Feed and residual use, FSI, and exports in 2003/04 are projected at 150, 73, and 2 million bushels respectively. Ending stocks are forecast to rise 5 million bushels in 2003/04 to 62.8 million and the stocks-to-use ratio is 27.9 percent. Season-average farm prices for 2003/04 are projected at \$1.15-\$1.55 per bushel compared with \$1.81 a year earlier.

## Hay Disappearance Decreased in 2002/03

Hay stocks on May 1, 2003, totaled 22.2 million tons, compared with 22.5 million in 2002. In the 2002/03 May-April hay year, total disappearance (beginning stocks plus production less ending stocks) was 151 million tons, down 3 percent from the previous year.

Roughage consuming animal units were essentially unchanged, thus disappearance per unit was down 3 percent from the 2.15 tons consumed in 2001/02. However, silage production in 2002 was up 2 percent and together hay and silage per roughage consuming animal units (RCAU) was the same as the previous year. Farmers in March indicated they planned to harvest 63.6 million acres of hay in 2003, compared with 64.5 million acres harvested in 2002.

Given projected livestock numbers, current pasture and range conditions, and hay stocks, prices are expected to remain weak in the 2003/04 hay marketing year. The simple average of all hay prices from May 2002 to April 2003 was \$94.52 per ton, compared with \$96.28 during the same period a year earlier.

# **International Outlook**

### Record Global Coarse Grains Production Projected in 2003/04

World coarse grains production is expected to reach a record 909 million tons in 2003/04, up 48 million tons from the previous year. Most of the increase is in the United States, with foreign production up only 15 million tons. Canada is expected to rebound from drought on the Western Plains in 2002/03, increasing coarse grains production nearly 8 million tons. Australia is also expected to recover from drought. boosting production more than 4 million tons. India's coarse grains production, assuming a normal monsoon, is expected to boost production more than 5 million tons. Increased area is expected to boost Mexico's production nearly 2 million tons and Eastern Europe by 1 million. The European Union (EU) is projected up 1 million to 107 million due to higher yields. These increases are partly offset by expected reductions in production in the former Soviet Union and China.

Coarse grains production in the former Soviet Union is projected at 54 million tons, down nearly 7 million tons, as a result of winterkill. However, the coarse grain production decline will likely be limited by increased seeding of spring barley on fields where winter grains were killed.

Coarse grain production in China is expected to decline nearly 4 million tons to 129 million. Area planted to corn is expected to decline 2 percent in 2003/04 as some producers turn to other crops especially soybeans and cotton. Trend yields almost match the previous year's 5.1 tons per hectare. China is expected to remain the largest foreign coarse grains producer.

Global corn production is projected to reach a record 624 million tons, up 30 million tons. Most of the increase is in the United States, with foreign corn production expected to increase only 3 million tons in 2003/04. Based on increased expected area, a 2-million-ton increase is expected in Mexico and Eastern Europe. Increases of 0.5 million tons or less are expected in Argentina, Brazil, India, Canada, and the Philippines. These increases are partly offset by a 3-million-ton decline projected in China.

World barley production is projected up 10 million tons to 142 million, the largest in 6 years. Foreign

barley production is expected to increase 8 million tons, led by a 6-million-ton increase in Canada and a 3-million-ton increase in Australia as these countries rebound from drought. The EU is expected to remain the largest producer, up 2 million tons from the previous year to more than 50 million tons. North Africa's barley crop has benefited from excellent winter rains, boosting production prospects by over 1 million tons to 4 million. However, in the former Soviet Union a severe winter killed much of the winter barley, more than offsetting increased spring barley plantings, and barley production is projected down 4 million tons to 30 million.

Global sorghum production is projected at 58 million tons, up 8 million from the previous year and the largest in 4 years. Foreign sorghum production is expected to increase 3 million tons to 44 million. Sudan is projected to increase production almost 2 million tons to over 4 million with a return to normal weather. Sorghum production is projected to increase nearly a million tons each in India and Australia.

World oats production is projected up almost 2 million tons to 27 million. The largest increase is in Canada, rebounding more than 1 million tons to almost 4 million. Small increases are expected for Australia, also rebounding from drought, and the former Soviet Union, with increased area planted to oats. However, a small decline is projected for the EU as yields are not expected to reach the previous years' above-average levels.

Global rye production is projected to drop 4 million tons to 16 million tons, the lowest level in the USDA database going back to 1960/61. Rye production in the former Soviet Union was devastated by an extremely severe winter, dropping more than 3 million tons to 7 million. Rye production is down nearly 1 million tons in the EU as policies encourage producers to shift area to other crops.

## Lowest Beginning Stocks in 20 Years To Limit Increase in Global Supplies in 2003/04

World coarse grains beginning stocks for 2003/04 are forecast at 142 million tons, down 33 million tons from estimated stocks a year earlier, and the lowest since 1984/85. The forecast decline in global coarse grains stocks during 2002/03 was the largest since 1995/96. This month several changes were made to the estimates for China's coarse grains supply and demand for 2002/03, dropping China's 2002/03 ending stocks 10.5 million tons. Barley production was reduced slightly, corn consumption increased 4.5 million tons due to revisions in industrial use, and corn exports increased 0.5 million. Moreover, consumption estimates also increased for 2000/01 and 2001/02, dropping China's coarse grains beginning stocks for 2002/03 by 5.2 million tons.

Global coarse grains supply can be measured as beginning stocks plus production (for an individual country imports would be added, but for the world that would cause double counting). For 2003/04, most of the 48-million-ton increase in global production is offset by the 33-million-ton reduction in beginning stocks, leaving global supply up less than 16 million tons, an increase of less than 2 percent.

# Modest Consumption Growth Expected in 2003/04, But Enough To Reduce Stocks

World coarse grains consumption in 2003/04 is projected at 917 million tons, an increase of about 3 percent. Foreign consumption is expected to grow 20 million tons to 697 million. The largest increase is more than 4 million tons in India, where increased millet and sorghum production are expected to result in a rebound in human consumption. An increase in coarse grains consumption of over 3 million tons is projected for Mexico, partly because sorghum is expected to replace imports of cracked corn that currently are not included in the corn balance sheet. EU coarse grains consumption is up over 3 million tons because of reduced supplies of wheat for feeding. Canada is expected to boost coarse grains consumption more than 2 million tons because of increased production. Increased production is expected to boost use more than 1 million tons in Australia. Brazil's consumption growth is expected to continue to rise due to growing meat production, up 1.0 million tons. Consumption growth is expected to be significant, but less than 1 million tons each in South Korea, with reduced wheat for feeding; in Russia, as poultry production expands; and in North Africa, with increased production. Japan is the only major consumer that is expected to reduce consumption as meat production slows.

While the projected increase in 2003/04 coarse grains consumption is less than the production gains, the level of total use is expected to remain larger than

production for the fifth consecutive year. So global coarse grains stocks are expected to continue to decline in 2003/04, dropping 8 million tons. Foreign coarse grains stocks are projected down 15 million tons, with a 12-million-ton drop in China. China's coarse grains ending stocks of 37 million tons in 2003/04 are projected at about one-third the level estimated for 1999/2000. China appears to be intentionally reducing government stocks because they are expensive to maintain. Moreover, the forecast ending stocks still represent 3 months of expected use.

Coarse grains ending stocks are projected to drop almost 5 million tons in the former Soviet Union as production drops and use grows. Coarse grains stocks are expected to increase modestly in 2003/04 in Canada, Australia, North Africa, and Eastern Europe.

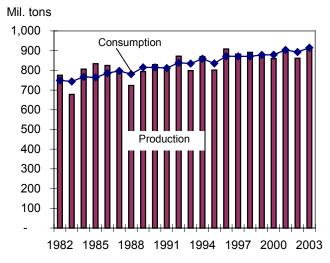
# Coarse Grains Trade Up in 2003/04, U.S. Exports To Recover

Global coarse grains trade in 2003/04 is projected at nearly 102 million tons, up 1 million from the previous year. Sorghum trade is expected to increase nearly 2 million tons, with increased supplies in the United States and Australia. Reduced availability of wheat for feeding will help boost import demand for coarse grains.

World corn imports in 2003/04 are projected to nearly match the forecast for the previous year. Canada is expected to reduce corn imports 1.7 million tons to 2 million as domestic coarse grains production rebounds from drought. A decline of 0.5 million tons in corn imports is projected for Japan as meat production declines. Small reductions in corn imports are also expected for South Africa, Peru, Brazil, and Zimbabwe. However, these declines are partly offset by increased corn imports projected for South Korea, up 0.5 million because of less competition from wheat for feeding; Russia, up 0.3 million as poultry production increases; and Israel up 0.25 million due to less competition from wheat. Several other countries are expected to increase corn imports by smaller amounts as consumption in those countries is expected to increase slowly.

Competition among corn exporters is expected to remain strong in 2003/04 as prices decline. Argentina and most minor corn exporters are expected to maintain corn exports in 2003/04, similar to the level forecast for the previous year.

# Figure 10 World coarse grain production and consumption



Source: Foreign Agricultural Service, USDA.

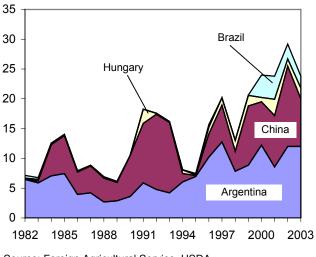
Eastern Europe is projected to increase corn exports nearly 1 million tons.

China's corn exports are expected to drop from 13.5 million tons forecast for 2002/03 to 8 million in 2003/04. Reduced international prices for corn and tightening supplies in China are expected to reduce the incentive for the Government to support corn exports. While below 2002/03's record pace, China's corn exports in 2003/04 are expected to remain at about the levels reached in 2000/01 and 2001/02.

Most of the drop in China's corn exports is expected to be captured by the United States. U.S. exports are projected up 5 million tons to 47 million. This is about the level reached in 2001/02.

#### Figure 11 Corn exports for major competitors





Source: Foreign Agricultural Service, USDA.

With a larger supply and competitive prices, U.S. sorghum exports in 2003/04 are projected to reach 6.3 million tons, up 1.7 millionfrom the previous year's drough-reduced level. This level of sorghum exports is similar to those reached in 2001/02 and 1999/2000. U.S. coarse grains exports in 2003/04 are projected at nearly 54 million tons, up 14 percent from the previous year, when U.S. production declined, but are about the same as in 2001/02.

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#### Data

The Feed Grains Data Delivery System (http://www.ers.usda.gov/db/feedgrains/) is a queryable database that contains monthly, quarterly, and annual data on prices, supply, and use of corn and other feed grains. This includes data published in the monthly Feed Outlook and the annual Feed Yearbook reports.

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The 2002 Farm Bill: Provisions and Economic Implications, a side-by-side comparison of the new farm bill with 1996-2001 farm legislation, is available at http://www.ers.usda.gov/Features/FarmBill/.

Agricultural Productivity and Efficiency in Russia and Ukraine: Building on a Decade of Reform (http://www.ers.usda.gov/publications/aer813/) reviews the evidence on the productivity of agricultural production and explores some of the causes of inefficient practices. Implementing institutional reforms would allow productivity and efficiency in the agricultural sector to improve.

### **Related Websites**

WASDE (http://www.usda.gov/oce/waob/wasde/latest.pdf) Grain Circular (http://www.fas.usda.gov/grain/circular/2003/05-03/graintoc.htm) World Agricultural Production (http://www.fas.usda.gov/wap/circular/2003/04-03/toc.html) Corn Briefing Room (http://www.ers.usda.gov/briefing/corn/)

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Table 1Feed Year/	Beg.	Produc-	Im-			Feed &	Ex-	Total	End.	Farm
Qtr.	stocks	tion	ports	Supply	FSI	resid.	ports	disp.	stocks	price
Corn:				N	lillion bushe	els				\$/bu
2000/01										
Sep-Nov	1,718	9,915	1	11,634	466	2,131	507	3,104	8,530	1.73
Dec-Feb	8,530		1	8,531	465	1,607	415	2,488	6,043	1.97
Mar-May	6,043		3	6,046	514	1,153	455	2,122	3,924	1.90
June-Aug	3,924		1	3,925	511	951	564	2,026	1,899	1.85
Mkt. yr.	1,718	9,915	7	11,639	1,957	5,842	1,941	9,740	1,899	1.85
2001/02										
Sep-Nov	1,899	9,507	2	11,408	489	2,207	448	3,144	8,265	1.86
Dec-Feb	8,265		2	8,266	480	1,540	451	2,471	5,795	1.96
Mar-May	5,795		4	5,799	544	1,162	496	2,203	3,597	1.93
June-Aug	3,597		2	3,599	540	968	494	2,002	1,596	2.16
Mkt. yr.	1,899	9,507	10	11,416	2,054	5,877	1,889	9,820	1,596	1.97
2002/03										
Sep-Nov	1,596	9,008	3	10,608	534	2,040	396	2,970	7,638	2.35
Dec-Feb	7,638		4	7,642	548	1,553	409	2,510	5,132	2.33
Mkt. yr.	1,596	9,008	15	10,619	2,285	5,650	1,625	9,560	1,059	2.25-2.35
2003/04	,	,			,			,		
Mkt. yr.	1,059	10,060	10	11,129	2,375	5,600	1,850	7,450	1,304	1.90-2.30
Sorghum:										
2000/01										
Sep-Nov	65	471	0	536	17	194	63	274	262	1.69
Dec-Feb	262		0	262	11	15	69	95	167	1.95
Mar-May	167		0	167	4	23	63	91	76	1.79
June-Aug	76		0	76	3	-10	42	35	42	2.03
Mkt. yr.	65	471	0	536	35	222	237	494	42	1.89
2001/02										
Sep-Nov	42	515	0	556	15	164	63	242	314	1.86
Dec-Feb	314		0	314	15	26	78	120	194	1.84
Mar-May	194		0	194	10	26	53	89	105	1.78
June-Aug	105		0	105	5	-6	46	45	61	2.25
Mkt. yr.	42	515	0	556	45	210	241	495	61	1.94
2002/03										
Sep-Nov	61	370	0	431	15	132	51	199	232	2.42
Dec-Feb	232		0	232	15	7	47	69	163	2.31
Mkt. yr.	61	370	0	431	45	160	180	385	46	2.30-2.40
2003/04										
Mkt. yr.	46	553	0	599	55	225	250	475	69	1.65-2.05
										continued-

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

Table 1Feed	-			ply and disa	ppearance		_			
Year/	Beg.	Produc-	Im-	<b>.</b> .		Feed &	Ex-	Total	End.	Farm
Qtr.	stocks	tion	ports	Supply	FSI	resid.	ports	disp.	stocks	price
Barley:				M	illion bush	els				\$/bu
2000/01		240	-	407		04	0	440	004	0.00
June-Aug	111	319	7	437	44	91 6	8	143 70	294 229	2.28
Sep-Nov Dec-Feb	294 229		5 8	299 237	39 37	6 22	25 16	70 75	229 162	1.95 2.10
Mar-May	162		o 9	171	52	4	9	65	102	2.10
Mkt. yr.	111	319	29	459	172	123	58	353	106	2.11
2001/02										
June-Aug	106	249	8	364	44	63	11	118	245	2.24
Sep-Nov	245		5	250	39	9	7	55	195	2.27
Dec-Feb	195		6	201	37	17	5	59	142	2.16
Mar-May	142		5	147	52	-1	3	54	93	2.16
Mkt. yr.	106	249	24	380	172	88	27	287	93	2.22
2002/03										
June-Aug	93	227	9	329	44	54	6	105	224	2.46
Sep-Nov	224		3	227	39	11	7	57	170	2.69
Dec-Feb	170		5	175	37	6	8	51	124	2.92
Mkt. yr.	93	227	20	340	173	75	25	273	67	2.73
2003/04										
Mkt. yr.	67	300	30	397	173	100	25	125	99	2.15-2.55
Oats:										
2000/01										
June-Aug	76	150	21	247	17	79	0	96	150	1.03
Sep-Nov	150		37	187	16	26	0	43	144	1.04
Dec-Feb	144		28	172	14	48	0	62	110	1.22
Mar-May	110		20	130	21	36	0	57	73	1.27
Mkt. yr.	76	150	106	332	68	189	1.7	259	73	1.10
2001/02										
June-Aug	73	117	18	207	17	73	1	91	116	1.29
Sep-Nov	116		48	165	17	33	1	50	114	1.59
Dec-Feb	114		18	132	15	23	1	39	93	1.92
Mar-May	93		12	105	24	18	1	42	63	1.99
Mkt. yr.	73	117	96	286	72	148	2.8	223	63	1.59
2002/03										
June-Aug	63	119	14	196	17	67	0	84	112	1.72
Sep-Nov	112		39	151	17	30	1	47	104	1.84
Dec-Feb	104		24	128	15	30	1	46	82	2.05
Mkt. yr.	63	119	100	282	72	150	3	225	58	1.81
2003/04										
Mkt. yr.	58	135	95	288	73	150	2.0	152	63	1.15-1.55
Totals may no			~~							

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

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.

Source: Economic Research Service, U.S. Department of Agriculture.

Year									Feed/
beginning	Corn	Sorg.	Barley	Oats	Feed	Wheat	Total	Animal	animal
Sept. 1					grains		grains	units	unit
			Millio	n metric tor	ıs			Mil.	Tons
2000/01									
Sep-Nov	54.1	4.9	0.1	0.5	59.7	-0.7	59.0		
Dec-Feb	40.8	0.4	0.5	0.8	42.5	0.3	42.8		
Mar-May	29.3	0.6	0.1	0.6	30.5	-0.1	30.4		
June-Aug	24.2	-0.3	1.4	1.1	26.4	6.7	33.1		
Mkt. yr.	148.4	5.7	2.1	2.9	159.1	6.3	165.3	89.3	1.85
2001/02									
Sep-Nov	56.0	4.2	0.2	0.6	61.0	-0.6	60.4		
Dec-Feb	39.1	0.7	0.4	0.4	40.5	-0.2	40.3		
Mar-May	29.5	0.7	0.0	0.3	30.4	-0.7	29.8		
June-Aug	24.6	-0.2	1.2	1.0	26.6	5.2	31.9		
Mkt. yr.	149.3	5.3	1.7	2.3	158.6	3.7	162.4	89.4	1.82
2002/03									
Sep-Nov	51.8	3.4	0.2	0.5	56.0	-2.2	53.8		
Dec-Feb	39.4	0.2	0.1	0.5	40.3	0.3	40.6		
Mkt. yr.	143.5	4.1	2.0	2.5	152.0	4.3	156.3	87.8	1.78
2003/04									
Mkt. yr.	142.2	5.7	2.2	2.5	152.7	4.8	157.4	86.8	1.81

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

Source: USDA, Economic Research Service.

#### Table 3--Cash feed grain prices

			Sorghum,		Barley,	Barley,	Oats,
	Corn,	Corn,	No. 2, Yel,	Sorghum,	No. 2,	No. 3 or	No. 2,
	No. 2, Yel,	No. 2, Yel,	Texas	No. 2, Yel,	feed,	better, Malting,	Heavy white,
	Ctrl. IL 1/	Gulf ports 1/	High Plains 1/	Gulf ports 1/	Duluth 2/	Minn. 2/	Minn. 2/
Mkt. yr.	\$/bu	\$/bu	\$/cwt	\$/cwt	\$/bu	\$/bu	\$/bu
1999/00	1.86	2.23	3.36	3.79	NQ	NQ	1.26
2000/01	1.91	2.29	3.87	4.35	1.47	2.37	NQ
2001/02 3/	1.92	2.28	3.90	4.23	1.52	2.44	NQ
Monthly:							
2001/02:							
Dec.	1.97	2.35	4.01	4.39	1.54	2.48	NQ
Jan.	1.95	2.34	3.89	4.34	1.55	2.48	NQ
Feb.	1.92	2.30	3.81	4.20	1.55	2.48	NQ
Mar.	1.92	2.28	3.84	4.17	1.55	2.48	NQ
2002/03:							
Dec.	2.32	2.71	4.68	5.13	2.00	3.95	NQ
Jan.	2.29	2.69	4.55	5.01	2.00	3.94	2.30
Feb.	2.33	2.69	4.54	4.95	2.00	3.77	2.37
Mar. 3/	2.31	2.67	4.39	4.78	2.00	3.81	2.05

1/ Marketing year beginning September 1.

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

Source: U.S. Department of Agriculture, Agricultural Marketing Service.

	Soybean	Cotton-	Corn	Corn	Meat &	Dists.'		
	meal	seed	gluten	gluten	bone	dried	Wheat	Alfalfa
	high protein	meal,	feed,	meal,	meal,	grains,	midlgs,	farm
	Decatur,	41% slv.	IL	IL	Central	Lawrence-	Kansas	price 2/
	IL 1/	Memphis 1/	pts. 1/	pts. 1/	U.S. 1/	burg, IN 1/	City 1/	
				\$/t	on			
Mkt. yr.								
1999/00	165.92	124.00	52.89	237.31	163.13	82.93	53.13	80.20
2000/01	174.15	145.17	58.89	248.43	177.19	84.47	61.77	88.90
2001/02 3/	165.42	134.06	59.85	243.56	167.38	78.48	59.31	104.00
Monthly:								
2001/02:								
Dec.	154.18	134.17	65.00	257.50	160.79	90.75	76.45	105.00
Jan.	158.01	133.13	60.00	236.00	158.14	86.00	57.14	101.00
Feb.	153.10	125.00	56.50	221.88	166.07	81.25	60.53	100.00
Mar.	160.49	131.88	55.00	219.38	187.20	79.00	66.00	99.60
2002/03:								
Dec.	163.60	156.40	70.00	255.85	160.55	95.00	78.30	100.00
Jan.	167.40	167.50	68.25	239.75	169.80	83.50	70.20	97.60
Feb.	176.80	143.60	66.50	234.00	169.75	82.75	70.65	96.40
Mar. 3/	175.40	142.40	66.25	230.70	180.50	85.00	64.80	96.20

Table 4--Selected feed and feed byproduct prices

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

Sources: U.S. Department of Agriculture, Agricultural Marketing Service and National Agricultural Statistics Service.

		Glucose		Alco	ohol	Cereals	Total
		and			Bev.	& other	food &
Year	HFCS	dex.	Starch	Fuel	& Mfg.	products	industrial
				Million bushe	ls		
2000/01							
Sep-Nov	126.0	56.2	63.4	142.9	31.8	46.0	466.2
Dec-Feb	118.4	49.9	59.2	158.1	33.3	46.0	464.9
Mar-May	137.6	53.7	61.7	161.3	34.8	46.5	495.6
June-Aug	147.8	58.1	62.9	165.4	30.1	46.5	510.8
Mkt. year	529.8	218.0	247.3	627.6	130.0	185.0	1,937.6
2001/02							
Sep-Nov	127.2	56.0	62.4	165.5	32.0	46.2	489.3
Dec-Feb	119.9	49.7	57.9	173.1	33.6	46.2	480.4
Mar-May	143.3	54.6	61.3	184.6	35.1	46.8	525.6
June-Aug	150.3	56.8	64.1	190.6	30.3	46.8	538.8
Mkt. year	540.6	217.1	245.7	713.8	131.0	186.0	2,034.1
2002/03							
Sep-Nov	126.6	54.5	63.5	210.9	32.0	46.5	534.0
Dec-Feb	121.1	49.9	63.0	234.1	33.6	46.5	548.1
Mkt. year	552.0	215.0	255.0	925.0	131.0	187.0	2,264.8
2003/04							
Mkt. year	557.0	218.0	260.0	1,000.0	132.0	188.0	2,355.0

	Corn meal,	Brewers'	Sugar,	HFCS, 42%	Corn starch,	
	yellow,	grits,	dextrose,	tank cars,	fob Midwest	
	New York	Chicago	Midwest	Midwest	3/	
	\$/cwt	\$/cwt	cents/lb	cents/lb	\$/cwt	
Mkt. yr. 1/						
1999/00	15.05	10.91	16.38	9.18	12.39	
2000/01	15.85	11.75	16.83	9.25	12.44	
2001/02 2/	15.74	11.75	18.61	10.58	12.46	
Monthly						
2002:						
Jan.	15.46	11.36	18.88	10.80	12.16	
Feb.	15.40	11.30	18.88	10.80	12.28	
Mar.	15.42	11.31	18.88	10.80	12.49	
Apr.	15.28	11.18	18.88	10.80	12.55	
2003:						
Jan.	16.49	12.38	20.88	11.50	12.91	
Feb.	16.61	12.50	20.88	11.50	12.82	
Mar.	16.42	12.31	20.88	11.50	13.03	
Apr. 2/	16.86	12.74	20.88	11.50	13.06	

#### Table 6--Wholesale corn milling product and byproduct prices

1/ Marketing year beginning September 1. 2/ Preliminary. 3/ Bulk-industrial, unmodified. Source: <u>Milling and Baking News.</u>

Table 7U.S.	feed	arains	imports	hv	country	/ of	oriain
Table $I = 0.0$ .	iccu	grains	importa	IJУ	Country		ungin

Country/region	2000	)/2001	2001/2	2002	2002/2003
	Mkt. yr.	June-Feb.	Mkt. yr.	June-Feb.	June-Feb.
Oats:			Thousand tons		
Canada	1,466	1,234	1,138	1,043	706
Finland	103		264	216	284
Sweden	257	181	217	175	307
Total 1/	1,827	1,479	1,654	1,448	1,330
Barley, malting:					
Canada	585	401	488	390	297
Total 1/	585	401	489	391	340
Barley, other: 2/					
Canada	51	37	32	12	26
Total 1/	51	37	32	12	26

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 8U.S. feed grain expo Country/region	2000/0		2001/0	2	2002/2003
2	Mkt. yr.	SeptFeb.	Mkt. yr.	SeptFeb.	SeptFeb
			sand metric tons		•
CORN				,	
Japan	14,396	7,206	14,790	6,806	7,450
Mexico	5,906	2,423	4,464	2,190	2,849
Taiwan	4,831	2,260	4,340	2,224	2,341
Egypt	4,213	2,017	4,510	2,014	1,016
S. Korea	3,168	1,141	1,378	800	133
Canada	2,700	1,184	3,909	1,731	2,005
Colombia	1,615	714	1,698	768	898
Venezuela	1,264	433	460	121	320
Algeria	1,205	789	1,367	737	591
Saudi Arabia	1,053	635	714	427	125
Dominican Republic	976	444	1,030	459	470
Israel	694	465	832	351	60
Syria	588	305	786	359	227
Turkey	568	189	747	134	
Morocco	530	251	600	317	
Costa Rica	512	254	463	229	257
Tunisia	470	281	688	402	83
Peru	185	90	261	156	27
Iran	144	144	63		
Sub-Saharan Africa	113	72	695	160	222
Former USSR	113	10	86	74	
Chile	33	33	34	24	
EU	17	12	26	24 10	
Eo East Europe			20 15	15	4
China			20	20	
Others	3,882	1,982	3,790	2,177	1 274
					1,274
Total	49,175	23,333	47,768	22,703	20,353
SORGHUM					
Mexico	4,924	2,548	4,647	2,725	1,607
Japan	811	582	1,240	793	726
Israel	110	102	30	30	10
EU			9	8	
Others	69	64	68	27	61
Total	5,915	3,295	5,993	3,584	2,404
	2000/2		2001/20		2002/2003
	Mkt. yr.	June-Feb	Mkt. yr.	June-Feb.	June-Feb
BARLEY –	, ,		,		
Saudi Arabia	416	364			
Japan	388	307	293	275	256
Mexico	113	89	70	54	19
Taiwan	57	57			
				70	40.4
	32	25	94	78	1.34
Canada Other	32 667	25 592	94 117	78 99	134 38

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

1/ Totals may not add due to rounding.

Source: Bureau of the Census.