





www.ers.usda.gov

Feed Outlook

Allen Baker, and Edward Allen

2005/06 Feed Grain Supplies and Use to Increase

Contents Domestic Outlook

Feed Grains
Balance Sheet
Feed and Residual
Corn
Food Seed & Ind.

Food Seed & Ind Sorghum Barley Oats

Hay

Intl. Outlook

Coarse Grains Stocks Consumption

Trade
U.S. Corn Exports
Contacts & Links

Tables

Supply & Demand Feed & Residual Grain Prices By-product Prices Food & Industrial Milling Products U.S. Imports U.S. Exports

Web Sites

WASDE
Grain Circular
Word Agricultural
Production
Briefing Room
The next release is

June 14, 2005

Approved by the World Agricultural Outlook Board.

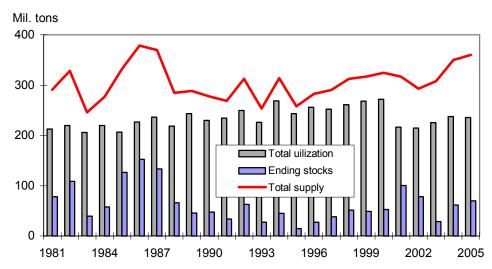
This report summarizes the initial U.S. Department of Agriculture (USDA) supply and demand projections and U.S. price prospects for the 2004/05 marketing year. Because planting of spring crops is still underway in the Northern Hemisphere and remains several months away in the Southern Hemisphere, these projections are highly tentative. Projections are based on USDA surveys, economic analysis, the assumption of normal weather, and judgment.

Forecasted corn production in 2005/06 is down from the record set last year as yields are lower. Corn use is expected to remain high and set a record, helped in part by increased ethanol production and increased exports. Sorghum and barley supply and use is expected to be down from last year. Forecasted 2005/06 oats supplies are up from last year but use is lower resulting in larger ending stocks. Forecasted ending stocks for feed grains are up from last year, suggesting weaker prices for all four feed grains.

Despite large world coarse grains production, and no growth in use, global coarse grains consumption in 2005/06 is projected larger than production. World coarse grains stocks are expected to decline 12 million tons to 162 million tons. However, the drop in stocks is concentrated in China, down 10 million tons, and some other countries such as the European Union-25 (EU-25) and former Soviet Union, while U.S. coarse grain stocks are expected to increase 8 million tons.

Domestic Outlook

Figure 1
U.S. feed grain supply and utilization



Source: Foreign Agricultural Service, USDA.

Feed Grain Production Down 23 Million Tons

Total feed grain production for 2005/06 is projected at 296 million tons, down from 319 million in the previous marketing year. This year-over-year decrease stems from a decline in projected yields for all of the feed grains. Oats production is expected to be up from 2004, because of an increase in expected harvested acres.

For the four feed grains combined, yield is projected lower in 2005/06 but harvested area is up slightly. Harvested area projections are based on planting intentions and average harvested to planted area projected based on the relationship between planted and harvested for 1999-2004, omitting 2002. Yield projections are based on linear trends, however, the corn yield was adjusted above trend based on the accelerated planting accomplished this spring. Beginning feed grain stocks are 62 million tons, up from 29 million tons in 2004/05. Total 2005/06 feed grain supply is projected at 360 million tons, up from 350 million.

Feed grain utilization is expected to rise in 2005/06. Food, seed, and industrial use is projected at 78 million tons, up from 76 million in 2004/05. Exports are expected to rise from 51 million tons in 2004/05 to 54 million tons. Feed and residual use is expected to decline 5 million tons in 2005/06 to 157 million. Despite the decrease in supply, ending feed grain stocks are projected to increase 8 million tons to 70 million. Lower prices are expected for corn, sorghum, barley, and oats.

Changes to 2004/05 Balance Sheets

The only changes made to the 2004/05 marketing year was a 5-million-bushel decrease in barley food, seed, and industrial to 145 million bushels, and a 5-million-bushel increase in feed and residual to 110 million. Barley imports were lowered 3

million bushels to 12 million, and exports were raised 2 million to 17 million to reflect trade to date: No changes were made to the other feed grains balance sheets.

Feed and Residual Down From 2004/05

The 2005/06 feed and residual use for the four feed grains plus feed wheat is projected at 162 million tons, down 6 million from the previous year. Feed and residual use per grain consuming animal unit (GCAU) is projected at 1.82 tons in 2005/06, down from 1.86 tons a year earlier. Total GCAUs are projected to be down about 1 percent to 89 million, the lowest since 2003/04. GCAUs are down as supplies of domestic cattle for feeding are constrained by heifer retention and cyclically low inventories. However, normalized trade in cattle less than 30 months old and higher slaughter weights are expected to raise beef production.

The following is a breakdown of animal production estimates for calendar year 2006:

- Beef production is expected to be 26 billion pounds, up from 25 billion a year earlier.
- 2006 pork production is 21 billion pounds, up 1 percent from 2005,
- poultry production is projected at 42 billion pounds, up from 41 billion in 2005,
- egg production is 7.6 billion dozen, up from 7.5 billion a year earlier,
- 2006 milk production is 178 billion pounds, up from 174 billion.

Lower Corn Production and Yield Expected in 2005/06

The 2005/06 corn crop is projected at 10,985 million bushels, down from the record of 11,807 million bushels of a year earlier. This year-over-year change stems from a nearly 600,000-acre increase in harvested area to 74 million acres, but a 12-bushel per acre decrease in yield to 148 bushels per acre. USDA generally uses a trend yield estimate for the May *World Agricultural Supply and Demand Estimates*, however, the yield forecast was raised above this trend due to the accelerated corn planting this spring. As of May 8, 2005, 79 percent of the 2005/06 corn crop has been planted, down from 81 percent last year but well above the 5-year average of 67 percent. Planted area is based on the March *Prospective Plantings* report, and harvested acreage is based on the relationship between planted and harvested area from 1999-2004 (omitting 2002).

Forecasted beginning 2005/06 corn stocks are 2,215 million bushels, up from 958 million a year earlier. Total corn supply is expected to be 13,210 million bushels, up 435 million from the previous year.

Total corn utilization is projected at a record 10,670 million bushels, up from 10,560 million bushels the previous year. This year-over-year increase stems from increased food, seed, and industrial use and exports; feed and residual is down 2 percent to 5,850 million bushels. Food, seed, and industrial use is projected at 2,870 million bushels, up from 2,760 million bushels expected in 2004/05. Increased ethanol production is the major factor behind this year-over-year increase. Exports for 2005/06 are projected at 1,950 million bushels, up 150 million from the previous year.

Ending stocks of corn for 2005/06 are projected at 2,540 million bushels, up from 2,215 million a year earlier. Season average corn prices for 2005/06 are projected at \$1.55-\$1.95 per bushel compared with \$2.00-\$2.10 per bushel the previous year.

Figure 2 **Corn production and yield**

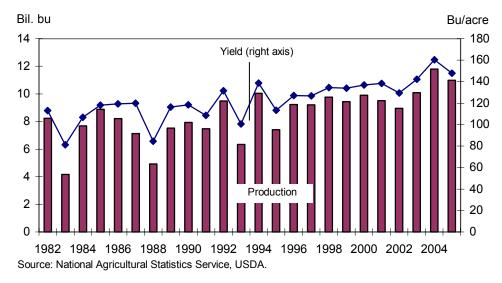


Figure 3

Accelerated spring plantings put the 2005 corn yield projection above trend

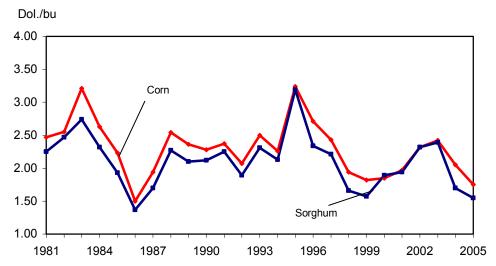
Bushels per acre

2005 projection 170 of 145 bu//acre 150 130 Corn yield 110 Linear trend from 1990 to 2005 (excluding the 1988 drought 90 1990 1992 1994 1996 1998 2000 2002 2004

Source: National Agricultural Statistics Service and Economic Research Service, USDA.

Figure 4

Annual average farm price for corn and sorghum



Source: National Agricultural Statistics Service, USDA.

Food, Seed, and Industrial Use To Continue Growing

Food, seed, and industrial (FSI) use in 2005/06 is expected to increase nearly 4 percent from a year earlier and equal to 27 percent of total use, up from an expected 26 percent in 2004/05 and 25 percent in 2003/04. High fructose corn syrup use of corn is projected to increase almost 1 percent from the 515 million bushels expected to be used in 2004/05. This is up from an expected decline in 2004/05.

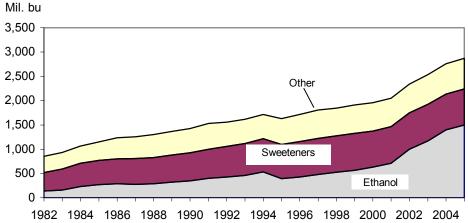
Glucose and dextrose use of corn in 2005/06 is expected to be down 1 percent from the expected 222 million bushels the previous year, which was down 3 percent from 2003/04. Starch use of corn in the first half of 2004/05 was up 5 percent from the year earlier but for all of 2004/05, starch use is expected to be up 3 percent from 2003/04. In 2005/06, corn used to produce starch may increase 2 percent from the expected use in 2004/05.

Corn use for ethanol in 2005/06 is projected to increase 7 percent following an expected 20-percent gain in 2004/05. Monthly ethanol production reported by the Department of Energy was record-high at 245,000 barrels per day in February 2005 (the latest available data), helping boost first-half 2004/05 to a record 1,773 million gallons. This ethanol production reflects the new plants that have been added in response to very profitable operations last year.

Stocks in February of ethanol also reported by DOE were up 19 percent from a year earlier but below their record high in March 2003 of 285 million gallons. Ethanol prices usually move with gasoline prices but after peaking last year, ethanol prices have been weakening while gasoline prices continued strong.

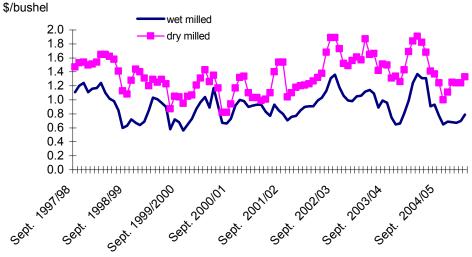
The cost of corn, the main feedstock for ethanol, has been falling along with coproduct prices. As a result, net corn costs are down from their peak in April 2004 when corn prices peaked. However, economic incentives for ethanol producers are not as favorable because of the lower ethanol prices. Ethyl alcohol trade imports which can be converted to ethanol have declined since prices have weakened. However, exports which about equaled imports in 2000/01 have declined over the 5-year period. Imports peaked in July 2004 at 36 million gallons and in March were at 14 million gallons. Exports in March were 3 million gallons.

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.

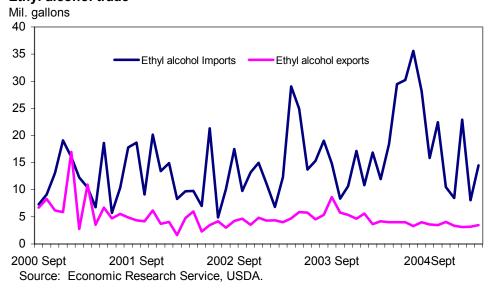
Figure 6 Net corn costs for wet and dry milling



Source: Economioc Research Service, USDA.

Figure 7





Sorghum Supply Projected at 471 Million Bushels

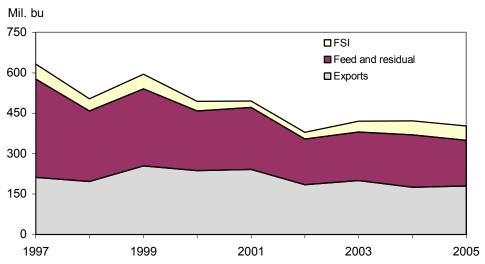
The 2005/06 sorghum crop is projected to be 405 million bushels, down from 455 million a year earlier. This year-over-year decrease stems from a 6-bushel-per-acre decrease in yield to 63.7 bushels per acre. Projected harvested area declined 159,000 acres to 6.4 million. The yield projection is based on a 10-year average (excluding 2002). Planted area comes from the March Prospective Plantings report, and harvested area comes from the 1999-2004 harvested/planted ratio (excluding 2002).

Forecasted 2005/06sorghum beginning stocks are 66 million bushels. Total supply is projected to be 471 million bushels, down from 488 million in 2004/05.

Total utilization is expected to decrease from 422 million bushels to 403 million bushels in 2005/06. Food, seed, and industrial use, and exports all show year-over-year increases. Feed and residual use for 2005/06 is projected at 170 million bushels, down from 195 million a year earlier. Food seed and industrial use is projected at 53 million bushels, up from 52 million bushels in 2004/05. This increase stems from expectations of sorghum prices to be slightly lower than corn prices, which will increase the use of sorghum in ethanol production. Exports are projected at 180 million bushels, up 5 million from 2004/05.

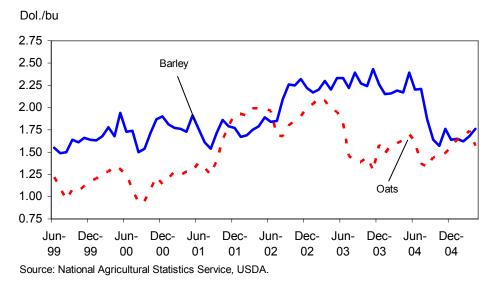
Ending sorghum stocks for 2005/06 are projected at 68 million bushels, up from 66 million a year earlier. The 2005/06 season average sorghum price is projected at \$1.35-\$1.75, down from \$1.65-\$1.75 a year earlier.

Figure 8 **Sorghum utilization**



Source: Economic Research Service, USDA.

Figure 9 **Barley and oats prices**



Barley Production To Decrease 54 Million Bushels in 2005/06

The 2005/06 barley crop is projected at 225 million bushels, compared with 279 million the previous year. This decrease comes from a 485,000-acre decrease in harvested area, which is projected at 4 million acres in 2005/06. A 5.8-bushel peracre yield decrease, now projected at 63.6 bushels per acre, also contributes to the decline.

Forecasted barley planted area is based on the March Prospective Plantings report, and harvested area comes from the 1999-2004 average relationship between

harvested and planted area (excluding 2002). Barley yield comes from 1960-2004 trend yields.

Barley beginning stocks are 135 million bushels, up from 120 million bushels in 2004/05 and the largest since 1994/95. Imports for 2005/06 are forecast at 15 million bushels, up 3.5 million from a year earlier. Total supply is 375 million bushels, down from 412 million bushels.

On the use side, feed and residual use, food, seed and industrial use, and exports are projected to decrease in 2005/06. Food, seed, and industrial use is down at 140 million bushels, from 145 million in 2004/05, as domestic beer demand is thought to be lagging. Feed and residual use for 2005/06 is projected at 100 million bushels, down from 115 million a year earlier. Exports are projected at 15 million bushels, down from 17 million in 2004/05. Total 2005/06 barley utilization is projected at 255 million bushels, down from 277 million a year earlier.

Ending barley stocks for 2005/06 are projected at 120 million bushels, down 15 million bushels from the previous year. Barley prices are projected at \$1.95-\$2.35 for 2005/06 compared with \$2.50 in the previous year.

Oats Production To Increase in 2005/06

The 2005/06 oats crop is projected at 130 million bushels, up from 116 million the previous year. This year-over-year increase stems from larger harvested area up 256,000 acres to 2 million acres, and a 1.2-bushel per-acre decrease in yield. The 2005/06 yield is projected to be 63.5 bushels per acre. Oat planted area is based on the March Prospective Plantings report, and harvested area comes from the 1999-2004 average relationship between harvested and planted area (excluding 2002). Oats yield comes from 1960-2004 trend yields, adjusted for rounding.

Forecasted oat beginning stocks are 54 million bushels and imports are projected at 85 million bushels, unchanged from the previous year. This puts the total 2005/06 oats supply at 269 million bushels.

Total 2005/06 utilization is projected at 207 million bushels, down from 212 million a year earlier. Feed and residual use is projected at 130 million bushels, down 5 million from 2004/05. Food, seed, and industrial use is projected at 74 million bushels unchanged from last year, and 2005/06 exports are projected at 3 million bushels. Ending stocks are expected to be 62 million bushels, up from 54 million in 2004/05. Oats prices are projected at \$1.00-\$1.40 per bushel, compared with \$1.45 in 2004/05.

Hay Disappearance Increased in 2004/05

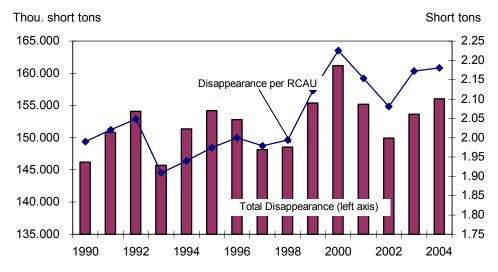
Hay stocks on May 1, 2005, totaled 28 million tons, compared with 26 million in 2004. In the 2004/05 May-April hay year, total disappearance (beginning stocks plus production less ending stocks) was 156 million tons, up 2 percent from the previous year. Roughage consuming animal units (RCAU) were up 1 percent, thus disappearance per unit was up fractionally from the 2.17 tons consumed in 2003/04.

Silage production in 2004 was up 1 percent and together hay and silage per RCAU were up 1 percent from the previous year. Farmers in March indicated they planned to harvest 63 million acres of hay in 2005, compared with 62 million acres harvested in 2004.

Disappearance of hay from December 1, 2004-May 1, 2005, totaled 87 million tons, 2 percent greater than the disappearance of 81.0 million tons for the same period a year earlier. Twenty-six of the 48 reporting States had higher hay stocks than a year ago. Many of the States reporting an increase in stocks were located in the northern Great Plains and the central Corn Belt. The increase in hay stocks from May 2004 in some areas can be attributed to higher hay production during 2004, mild winter conditions, and sufficient early-season pasture growth, reducing the need for supplemental feeding. Stocks declined in the western and southeastern States. In Washington, lack of winter precipitation and minimal spring pasture growth depleted hay stocks. In California, a decrease in 2004 hay production, combined with strong consumption by dairies, reduced hay stocks by 30 percent from the previous year. In the Southeast, hay stocks are down due to lower 2004 hay production in most areas, with some areas reporting poor quality as a result of wet weather during harvest.

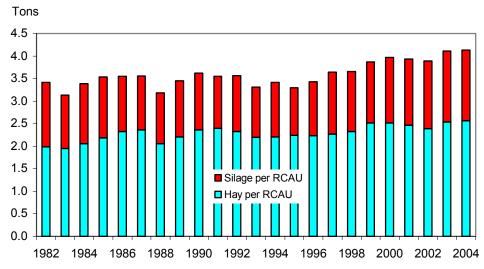
Given estimated livestock numbers, current pasture and range conditions, and hay stocks, prices are expected to remain weak in the 2005/06 hay marketing year. The simple average of all hay prices from May 2004 to April 2005 was \$89.94 per ton, compared with \$85.61 during the same period a year earlier.

Figure 10 Hay disappearance per RCAU



Source: National Agricultural Statistics Service, USDA.

Figure 11 Hay and silage per RCAU



Source: Economic Research Service, USDA.

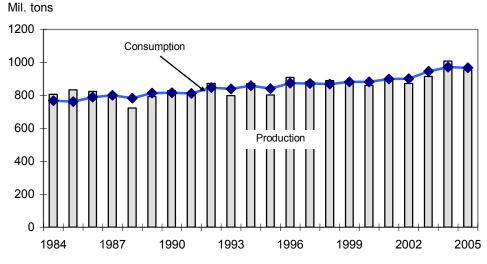
Global Coarse Grains Production To Remain Large in 2005/06

World coarse grains production is expected to reach 955 million tons in 2005/06, down 54 million tons from the previous year's record, but still the second largest crop. Foreign production is expected to decline 31 million tons, less than 5 percent. The EU-25 is projected down 18 million tons to 133 million partly because an increase in the set-aside requirement is expected to reduce area planted, but mostly because of a return to trend yields. In the former Soviet Union, coarse grain production is expected to drop 6 million tons to 56 million as area declines and yields return to average, assuming normal weather. An assumed return to normal yields also drops Other Europe 4 million tons to 25 million. Normal yields are expected to drop production in South Africa 2.5 million tons to 10 million, leading a drop of 7 million for Sub-Saharan Africa. However, following poor yields last year, coarse grains production is expected to increase 2 million tons in India, where most coarse grains are used for food. Rebounding yields are expected to boost Brazil's production 7 million tons to 47 million. Changes for other countries are less dramatic.

Coarse grain production in China is expected to decrease 1 million tons to 136 million. Area planted to corn is expected to increase in 2005/06 because of government incentives for grain production. However, trend yields imply a decline from the previous year when weather was favorable. China is expected to remain the largest foreign coarse grains producer.

Global corn production is projected to reach 674 million tons, down 34 million tons from the previous year's record. Foreign corn production is expected to decline 13 million tons in 2005/06. A drop of nearly 6 million tons is expected for Sub-

Figure 12 World coarse grain production and consumption



Source: Foreign Agricultural Statistics Service.

Saharan Africa, as South Africa and Nigeria are not expected to match the good yields of the 2004/05 crop, and drought has hurt 2005 production in several other countries. A 5.5-million-ton decline is expected in the EU-25 as area planted declines with the required set-aside. Other Europe is expected to reduce corn production nearly 4 million tons in 2005/06 assuming a return to average yields. Moreover, corn production in the former Soviet Union is also expected to decline 4 million tons with a return to average yields. These declines are partly offset by a rebound of 6.5 million tons in Brazil's expected corn crop.

World barley production is projected down 15 million tons to 138 million. The EU-25 is expected to remain the largest producer, at 54 million tons, but is expected to drop 7.5 million tons because with the increased set-aside requirement area is expected to decline, and mostly due to a return to trend yields which implies a decline from last year's record. The former Soviet Union is expected to reduce barley production 2 million tons mostly because reduced yields in the Ukraine will more than offset improved yields in Kazakhstan. North Africa's barley crop is expected to drop 2 million tons because of drought and cold weather in Morocco. Canada is expected to increase barley area, but not match last year's record yield, reducing production nearly 1 million tons. Australia's barley production is projected unchanged.

Global sorghum production in 2005/06 is projected at 57 million tons, down 2 million from the previous year. Foreign sorghum production is expected to decline

slightly to 47 million tons in 2004/05. Sub-Saharan production is expected to decline 1 million tons to 19 million. Improved expected yields in Sudan are more than offset by reductions in Nigeria, Ethiopia, and others. Australia's production is also expected to decline compared with last year's exceptionally good crop.

World oats production in 2005/06 is projected down slightly to 25 million tons. Lower yields are expected in the EU-25, especially in Sweden and Finland. Canada is expected to boost oats area and production.

Global rye production in 2005/06 is projected to decline 1 million tons to 16 million tons, the second lowest level in the USDA database going back to 1960/61. Rye production in the EU-25 is no longer supported by intervention, and area is expected to continue to drop. A rebound in Russia's yield is expected as winter conditions have been more favorable.

Increased Beginning Stocks To Limit Decline in Global Supplies in 2005/06

World coarse grains beginning stocks for 2005/06 are forecast at 174 million tons, up 38 million tons from a year earlier. 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 2005/06, the 38-million-ton increase in global stocks offsets much of the 54-million-ton decrease in production, leaving global supply down only 16 million tons, a decline of 1 percent.

Coarse Grain Consumption Decline Expected in 2005/06

World coarse grains consumption in 2005/06 is projected at 967 million tons, a very slight decline of less than 1 percent. Foreign consumption is expected to decline less than 2 million tons to 731 million. The lack of growth is partly caused by a 4-million-ton drop in expected consumption in the EU-25, and a 2-million-ton decline in the former Soviet Union. In both regions reduced coarse grains production is expected to result in an increase in wheat used for feed. Sub-Saharan Africa is expected to use less coarse grains for food because of reduced production. China is projected to increase consumption 2 million tons as meat production expands. Recovery of corn used to feed poultry in Southeast Asia is expected to be slow as problems with avian influenza are expected to persist. Most other regions are expected to have slow growth or no growth in coarse grains use due to slowly increasing or stagnating meat production.

Global coarse grains stocks are expected to decline in 2005/06, dropping 12 million tons. Foreign coarse grains stocks are projected down 20 million tons, with a 10-million-ton drop in China. China's projected coarse grains ending stocks of 26 million tons in 2005/06 are down more than 100 million tons from the level estimated for 1999/2000. China appears to have been intentionally reducing government corn stocks because they are expensive to maintain. Moreover, the forecast ending stocks still represent 2 months of expected use, and this has been enough to maintain only modest corn price increases in China.

Coarse grains ending stocks are projected to decline 4 million tons in the EU-25, 1.5 million in Sub-Saharan Africa, more than 1 million in Other Europe, and 1 million tons in the former Soviet Union, but stay little changed in most other countries.

Coarse Grains Trade Steady in 2005/06, U.S. Exports Up

Global coarse grains trade in 2005/06 is projected at 98 million tons, virtually unchanged from the previous year. Corn trade is expected to decline fractionally, but still reach 75 million tons, while barley is projected at 15 million, sorghum at less than 6 million, oats at 2 million, and rye at nearly 1 million.

World corn trade for October-September 2005/06 is projected at 74.75 million tons. Brazil's corn imports are expected to drop 1.6 million tons to 0.4 million, as increased domestic production cuts into imports from Argentina. Zimbabwe is expected to import nearly 0.5 million tons less if corn production rebounds. Turkey and Canada are expected to reduce corn imports slightly with increased production. On the other hand, reduced production in Russia and Mexico is expected to boost imports, while South Korea is expected to increase imports to maintain supplies For other countries, year-to-year changes in corn imports are expected to be small.

Competition among corn exporters is expected to be reduced in 2005/06 because China is expected to export 3 million tons less, cutting exports in half. While Argentina is expected to increase corn exports on a local March-February year, corn exports during October-September 2005/06 are expected to decline 0.5 million to 13.5 because of the exceptionally fast pace of sales of the corn crop harvested in 2005. Argentina's corn exports from October 2005 through March 2006 are expected to be slack. With smaller crops, Ukraine's corn exports are projected

down 0.7 million to 1.1 million, and Brazil's is down 0.3 million to 1.5 million. Most of Hungary's corn is expected to be shipped within the EU-25, reducing reported world trade.

China's corn exports are expected to continue to drop from 15.2 million tons reported for 2002/03, and 7.6 million for2003/04, to only 6 million forecast for 2004/05, and only 3 million projected for 2005/06. Tightening supplies in China appear to have changed the incentives for the government to subsidize corn exports. In 2005/06 low U.S. corn prices are expected to make it difficult for China to continue to subsidize massive exports.

Because of the drop in competitor's corn exports, the United States is expected to increase exports despite stagnant world trade. U.S. exports are projected up 4.5 million tons to 50 million, the largest since 1998/99.

With prices competitive compared with corn, U.S. sorghum exports in 2005/06 are projected to remain steady at 4.5 million tons, the same as the previous year. While the EU is not expected to purchase significant quantities of U.S. sorghum in 2005/06, strong demand from Mexico is expected. U.S. coarse grains exports in 2005/06 are projected at 55 million tons, up 9 percent from the previous year.

U.S. 2004/05 Corn Export Forecast Maintained

The 2004/05 U.S. corn export forecast remained at 45.5 million tons this month. According to *U.S. Export Sales*, as of May 5, 2005, outstanding sales of corn were 7.1 million tons, down from 9.7 a year ago. This would ordinarily lead to the conclusion that shipments for the rest of the marketing year would be much less than a year ago. However, the year-ago outstanding sales were inflated by an exceptionally large amount (over 2 million tons) of sales to "unknown' destinations. Most of those sales never were shipped, and therefore distort the year-to-year-comparison.

Figure 13

Corn exports of major competitors

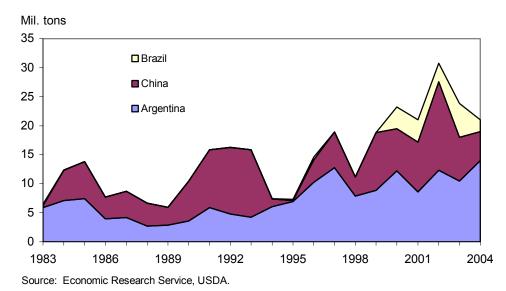
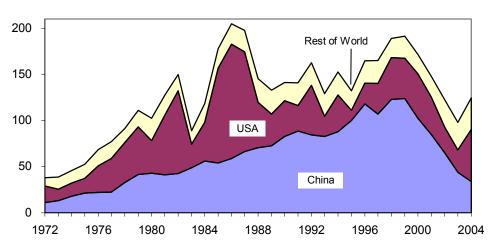


Figure 14 **Global ending corn stocks**

Mil. tons



Source: Foreign Agricultural Service, USDA.

Contacts and Links

Contact Information

Allen Baker (domestic), (202) 694-5290, albaker@ers.usda.gov Edward Allen (international), (202) 694-5288, ewallen@ers.usda.gov

Subscription Information

Subscribe to ERS' e-mail notification service at http://www.ers.usda.gov/updates/ to receive timely notification of newsletter availability. Printed copies can be purchased from the USDA Order Desk by calling 1-800-999-6779 (specify the issue number).

To order printed copies of the five-field crop newsletters—cotton and wool, feed, rice, oil crops, and wheat—as a series, specify series SUB-COR-4043

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.

Recent Reports

Black Sea Grain Exports: Will They Be Moderate or Large? This report examines the prospects for grain exports by the transition economies of Central and Eastern Europe (CEE) and the Newly Independent States (NIS) that export through the Black Sea, the largest being Russia and Ukraine. This report is available at: http://www.ers.usda.gov/publications/WRS04/OCT04/WRS040502/

Forecasting Feed Grain Prices in a Changing Environment. Structural change has been occurring throughout the feed grains sector and has affected commodity markets and price forecasting relationships. This report includes tests for structural change and season average farm level price forecasting models for corn, sorghum, barley, and oats. This report is available at:

http://www.ers.usda.gov/publications/FDS/jul04/fds04F01/

Related Websites

WASDE (http://usda.mannlib.cornell.edu/usda/reports/waobr/wasde-bb/2005/wasde05.pdf

Grain Circular (http://www.fas.usda.gov/grain/circular/2005/05-05/graintoc.htm) World Agricultural Production http://www.fas.usda.gov/wap_arc.html Corn Briefing Room (http://www.ers.usda.gov/briefing/corn/)

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

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

Table 1Feet	i grairis.	Marketing	year sup	ppiy and dis	sappearant	JC 1/				
Year/	Beg.	Produc-	lm-			Feed &	Ex-	Total	End.	Farm
Qtr.	stocks	tion	ports	Supply	FSI	resid.	ports	disp.	stocks	price
Corn:				N	/lillion bush	els				\$/bu
2002/03										
Sep-Nov	1,596	8,967	3	10,567	549	1,986	393	2,929	7,638	2.34
Dec-Feb	7,638		4	7,642	563	1,557	390	2,510	5,132	2.33
Mar-May	5,132		5	5,137	617	1,141	393	2,152	2,985	2.35
June-Aug	2,985		2	2,987	611	879	411	1,900	1,087	2.21
Mkt. yr.	1,596	8,967	14	10,578	2,340	5,563	1,588	9,491	1,087	2.32
2003/04										
Sep-Nov	1,087	10,089	2	11,178	589	2,166	470	3,225	7,954	2.16
Dec-Feb	7,954		4	7,957	609	1,578	499	2,686	5,271	2.42
Mar-May	5,271		5	5,277	676	1,161	469	2,306	2,970	2.82
June-Aug	2,970		3	2,973	664	892	459	2,015	958	2.55
Mkt. yr.	1,087	10,089	14	11,190	2,537	5,798	1,897	10,232	958	2.42
2004/05										
Sep-Nov	958	11,807	2	12,767	642	2,176	498	3,316	9,451	2.13
Dec-Feb	9,451		2	9,452	637	1,627	434	2,699	6,754	2.04
Mkt. yr.	958	11,807	10	12,775	2,760	6,000	1,800	10,560	2,215	2.00-2.10
2005/06										
Mkt. yr.	2,215	10,985	10	13,210	2,870	5,850	1,950	7,800	2,540	1.55-1.95
Sorghum:										
2002/03										
Sep-Nov	61	361	0	422	5	134	51	190	232	2.43
Dec-Feb	232		0	232	5	18	46	69	163	2.38
Mar-May	163		0	163	8	33	40	81	82	2.21
June-Aug	82		0	82	6	-14	48	39	43	2.13
Mkt. yr.	61	361	0	422	24	170	184	379	43	2.32
2003/04										
Sep-Nov	43	411	0	454	9	149	61	218	236	2.27
Dec-Feb	236		0	236	10	10	57	77	159	2.43
Mar-May	159		0	159	11	21	47	78	81	2.75
June-Aug	81		0	81	10	1	36	47	34	2.39
Mkt. yr.	43	411	0	454	40	180	201	421	34	2.39
2004/05										
Sep-Nov	34	455	0	488	13	150	44	206	282	1.80
Dec-Feb	282		0	282	13	11	55	79	203	1.67
Mkt. yr.	34	455	0	488	52	195	175	422	66	1.65-1.75
2005/06										
Mkt. yr.	66	405	0	471	53	170	180	350	68	1.35-1.75
			·		_					continued

continued--

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

Table 1reed	a grains.	Marketing	year sup	ppiy and dis	appearanc	se (cont.) 17				
Year/	Beg.	Produc-	lm-			Feed &	Ex-	Total	End.	Farm
Qtr.	stocks	tion	ports	Supply	FSI	resid.	ports	disp.	stocks	price
Barley:				N	Million bus	hels				\$/bu
2002/03										
June-Aug	92	227	9	328	40	58	7	104	224	2.48
Sep-Nov	224		3	227	35	16	7	57	170	2.68
Dec-Feb	170		5	175	34	9	8	51	123	2.88
Mar-May	123		2	125	46	1	9	56	69	2.85
Mkt. yr.	92	227	18	337	154	84	30	268	69	2.72
2003/04										
June-Aug	69	278	3	351	40	66	3	109	242	2.89
Sep-Nov	242		4	246	35	4	9	48	198	2.83
Dec-Feb	198		5	203	36	8	6	50	153	2.81
Mar-May	153		8	161	35	6	0	41	120	2.77
Mkt. yr.	69	278	21	368	145	84	19	248	120	2.83
2004/05										
June-Aug	120	279	5	405	40	73	1	114	290	2.71
Sep-Nov	290		4	294	35	7	6	48	246	2.41
Dec-Feb	246		1	247	35	16	7	57	191	2.47
Mkt. yr.	120	279	12	412	145	115	17	277	135	2.50
2005/06										
Mkt. yr.	135	225	15	375	0	100	15	115	120	1.95-2.35
Oats:										
2002/03										
June-Aug	63	116	14	193	17	63	0	81	112	1.70
Sep-Nov	112		41	152	17	31	1	48	104	1.82
Dec-Feb	104		23	127	15	28	1	44	83	2.05
Mar-May	83		18	101	23	28	0	51	50	2.01
Mkt. yr.	63	116	95	274	72	150	2.6	224	50	1.81
2003/04										
June-Aug	50	144	21	215	16	68	0.5	84	132	1.44
Sep-Nov	132		28	160	17	23	0.9	41	119	1.39
Dec-Feb	119		21	140	16	28	0.7	45	95	1.54
Mar-May	95		20	115	25	25	0.3	50	65	1.64
Mkt. yr.	50	144	90	285	73	144	2.5	220	65	1.48
2004/05										
June-Aug	65	116	16	197	16	65	0.5	81	116	1.37
Sep-Nov	116		26	142	17	19	8.0	37	105	1.45
Dec-Feb	105		26	131	16	32	0.7	49	83	1.56
Mkt. yr.	65	116	85	266	74	135	3.0	212	54	1.45
2005/06										
Mkt. yr.	54	130	85	269	0	130	3.0	133	62	1.00-1.40
Totals may no	nt add due	to rounding								

Totals may not add due to rounding.

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

^{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									Feed/
beginning	Corn	Sorg.	Barley	Oats	Feed	Wheat	Total	Animal	animal
Sept. 1					grains		grains	units	unit
			Millio	n metric tor	าร			Mil.	Tons
2003/04									
Sep-Nov	55.0	3.8	0.1	0.4	59.3	-1.7	57.6		
Dec-Feb	40.1	0.2	0.2	0.5	41.0	0.1	41.1		
Mar-May	29.5	0.5	0.1	0.4	30.6	-1.4	29.2		
June-Aug	22.7	0.0	1.6	1.0	25.3	7.3	32.6		
Mkt. yr.	147.3	4.6	2.0	2.3	156.1	4.3	160.5	89.4	1.79
2004/05									
Sep-Nov	55.3	3.8	0.2	0.3	59.6	-1.5	58.1		
Dec-Feb	41.3	0.3	0.3	0.5	42.5	0.4	42.9		
Mkt. yr.	152.4	5.0	2.3	2.1	161.8	5.7	167.5	90.2	1.86
2005/06									
Mkt. yr.	148.6	4.3	2.2	2.1	157.2	5.1	162.4	89.1	1.82

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
2001/02	1.92	2.28	3.90	4.23	1.52	2.44	NQ
2002/03	2.35	2.72	NQ	NQ	1.89	3.48	NQ
2003/04 3/	2.60	3.03	NQ	NQ	1.83	2.85	NQ
Monthly:							
2003/04:							
Dec.	2.38	2.84	NQ	NQ	1.80	2.65	NQ
Jan.	2.52	2.95	4.90	5.55	1.80	2.65	NQ
Feb.	2.73	3.12	5.17	5.71	1.80	2.60	NQ
Mar.	2.89	3.26	5.48	5.93	1.80	2.70	NQ
2004/05:							
Dec.	1.87	2.43	3.92	4.14	NQ	NQ	NQ
Jan.	1.86	2.44	3.86	4.09	1.70	2.48	NQ
Apr.	1.86	2.40	3.40	4.20	2.46	1.70	NQ
Mar. 3/	1.97	2.54	4.12	4.38	1.70	2.45	NQ

^{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.

Table 4--Selected feed and feed byproduct prices

	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.								
2001/02	165.53	134.06	59.71	242.86	167.55	78.48	59.31	104.00
2002/03 3/	178.87	147.23	65.27	241.65	170.81	74.94	64.02	100.00
2003/04 3/	260.06	182.87	83.24	326.83	216.39	115.90	75.78	100.00
Monthly:								
2003/04:								
Dec.	231.54	NQ	109.50	337.50	257.24	128.00	90.26	87.00
Jan.	252.15	188.00	101.63	360.63	118.33	125.00	90.58	84.80
Feb.	265.88	193.00	99.50	371.25	139.81	119.00	80.37	85.10
Mar.	301.14	205.10	83.20	383.00	270.00	120.00	82.34	86.20
2004/05:								
Dec.	NQ	117.00	53.25	253.63	162.99	71.00	46.75	92.40
Jan.	166.15	112.50	53.63	245.63	142.23	71.00	46.38	90.90
Feb.	167.95	131.03	51.38	232.50	138.84	71.00	37.88	91.90
Mar. 3/	189.90	140.78	51.90	240.50	174.43	73.00	41.38	96.40

^{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.

Table 5--Corn: Food and industrial uses

		Glucose		Alco	ohol	Cereals	Total
		and			Bev.	& other	food &
Year	HFCS	dex.	Starch	Fuel	& Mfg.	products	industrial
				Million bushe	els		_
2003/04							
Sep-Nov	126.3	57.0	64.4	262.5	32.3	46.6	589.0
Dec-Feb	120.4	51.5	65.9	290.3	33.8	46.6	608.6
Mar-May	140.2	58.7	70.0	304.6	35.4	47.1	656.0
June-Aug	143.3	60.8	71.3	310.1	30.5	47.1	663.1
Mkt. year	530.2	228.1	271.5	1,167.5	132.0	187.4	2,516.7
2004/05							
Sep-Nov	123.8	56.8	70.8	311.3	32.5	47.0	642.3
Dec-Feb	115.9	50.2	66.5	323.7	34.1	47.0	637.4
Mkt. year	515.0	222.3	280.0	1,400.0	133.0	189.0	2,739.3
2005/06							
Mkt. year	520.0	220.0	285.0	1,500.0	135.0	190.0	2,850.0

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

Table 6--Wholesale corn milling product and byproduct prices

	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/					
2001/02	15.74	11.75	18.61	10.58	12.46
2002/03	16.45	12.86	20.36	11.65	13.21
2003/04 2/	17.11	13.08	21.81	12.48	13.03
Monthly					
2003/04:					
Jan.	17.29	13.19	21.98	12.74	12.31
Feb.	17.64	13.54	21.98	12.75	12.67
Mar.	18.00	13.90	21.98	12.75	13.21
Apr.	18.05	13.95	21.98	12.75	13.75
2004/05:					
Jan.	15.61	11.50	23.10	13.50	11.89
Feb.	15.67	11.57	23.10	13.50	11.89
Mar.	16.17	12.07	23.10	13.50	11.92
Apr. 2/	15.87	11.77	23.30	13.50	12.25

^{1/} Marketing year beginning September 1. 2/ Preliminary. 3/ Bulk-industrial, unmodified.

Source: Milling and Baking News.

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

Country/region	2002	2/2003	2003/2	2004	2004/2005
	Mkt. yr.	June-Mar.	Mkt. yr.	June-Mar.	June-Mar.
Oats:			Thousand tons		
Canada	843	765	1,206	1,040	1,003
Finland	360	310	185	185	80
Sweden	381	307	167	118	209
Total 1/	1,640	1,414	1,559	1,343	1,293
Barley, malting:					
Canada	317	301	321	234	172
Total 1/	360	343	400	313	194
Barley, other: 2/					
Canada	42	31.9	50	33	43
Total 1/	42	31.9	50	33	43

^{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, U.S. Dept. of Commerce.

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

Country/region	2002/0	3	2003/0	4	2004/2005
	Mkt. yr.	SeptMar.	Mkt. yr.	SeptMar.	SeptMar
		1,0	00 metric tons		
Corn:					
Japan	14,383	8,416	14,611	8,692	9,246
Mexico	5,288	3,543	5,686	3,758	3,575
Taiwan	4,053	2,498	4,733	2,884	2,667
S. Korea	273	149	3,666	1,203	1,216
Egypt	2,686	1,129	3,220	2,220	2,082
Canada	3,946	2,343	2,014	1,322	1,490
Colombia	1,599	978	1,766	1,145	1,140
Algeria	898	624	1,270	867	617
Israel	268	68	1,176	969	287
Dominican Republic	937	556	809	449	541
Syria	517	260	780	516	624
Morocco	78	-	713	402	526
Turkey	981	114	654	14	2
Venezuela	609	344	653	320	137
Tunisia	123	74	618	426	124
Costa Rica	529	297	565	335	307
Guatemala	418	259	517	326	362
El Salvador	339	194	482	237	322
Saudi Arabia	131	127	476	316	137
Cuba	230	97	473	265	250
Sub-Saharan Africa	356	278	241	192	77
EU-25	68	49	154	156	46
Peru	42	27	148	91	147
Iran		-	64	64	-
Former USSR		0	60	13	17
Others	1,582	898	2,630	1,870	1,291
Total	40,334	23,322	48,179	29,051	27,231
Sorghum:					
Mexico	3,347	1,903	3,014	1,686	1,944
Japan	992	798	935	858	768
EU-25	183	1	852	759	154
Israel	39	14	131	122	27
Others	120	60	161	97	114
Total	4,681	2,775	5,093	3,521	3,006
_	2002/20			003/2004	2004/2005
_	Mkt. yr.	June-Mar.	Mkt. yr.	June-Mar.	June-Mar
Barley:					
Japan	358	256	216	216	209
Saudi Arabia		-	113	113	-
Canada	203	168	37	31	69
Mexico	25	20	15	13	29
Other	73	47	29	28	37
Total	659	490	409	400	344

^{1/} Totals may not add due to rounding.

Source: Bureau of the Census, U.S. Dept. of Commerce.