



United States
Department
of Agriculture

FDS-2007

April 2007



Electronic Outlook Report from the Economic Research Service

www.ers.usda.gov

Feed Situation and Outlook Yearbook

Allen Baker and Edward Allen

Abstract

An expected record utilization in 2006/07 has strengthened feed grain prices and is expected to reduce ending stocks to the lowest level since 1995/96. Corn prices are forecast at \$3.00-\$3.20 per bushel, up sharply from 2005/06. Grain sorghum prices also are expected to be stronger because of lower supplies of feed grains. The 2006 barley crop is down from 2005, and ending stocks are forecast lower. Barley prices are forecast at \$2.88 per bushel, up from \$2.53 in 2005/06. Season average prices for oats are expected to be stronger in spite of larger supplies in Canada. Prices for all hay are up in 2006/07 from 2005/06. Prices have been strong because 2006 production and December 1 stocks were lower.

Sharp growth in production of ethanol has increased expected U.S. feed grain utilization in 2006/07. Corn used to produce ethanol in 2006/07 is expected to increase 34 percent from the level used in 2005/06. Use at this level would be just 100 million bushels less than the expected exports for 2006/07 and the primary driver behind the expected record utilization.

Record world corn trade is projected for 2006/07 as import demand remains strong despite high prices. U.S. corn exports for the October-September trade year are forecast at 56.0 million tons, nearly the same as a year earlier. Competition from Argentina was down early in the trade year due to a small corn crop in 2006 but is expected to increase in the later months after Argentina's harvest in March and April 2007. World coarse grain consumption is expected to increase 3 percent in 2006/07, exceeding 1 billion tons for the first time. World coarse grain production in 2006/07 is expected to decline less than 1 percent, compared with the previous year. Foreign coarse grain production is forecast up 2 percent. Increasing global consumption is expected to reduce world ending stocks 26 percent to 123 million tons, the lowest in over 30 years.

Keywords: Corn, grain sorghum, barley, oats, hay, world coarse grains, world corn trade, ethanol, and corn sweeteners.

Contents

Summary	iii
Feed Grain Supply and Use	
More Ethanol Use and Exports Result in Higher Feed Grain Use in 2006/07	1
Corn Prices Strengthen in 2006/07 With Higher Utilization and Lower Expected Ending Stocks	3
Sorghum Production Decreases 29 Percent in 2006/07	8
Barley Production Declines in 2006	12
Total Oats Supply Down in 2006/07	16
Hay Situation and Outlook	
Hay Production Decreases in 2006	19
Feed and Residual Use	
Feed and Residual Use To Increase	23
Food, Seed, and Industrial Use of Corn	
Food, Seed, and Industrial Uses of Corn To Increase in 2006/07	26
World Coarse Grain Outlook	
Global Coarse Grain Production To Decline in 2006/07, Use Growing	30
World Coarse Grain Trade Outlook	
Despite High Prices, Record World Corn Trade in 2006/07	37
List of Figures	42
List of Appendix Tables	43

Situation Coordinators

Allen Baker (albaker@ers.usda.gov)
Edward Allen (ewallen@ers.usda.gov)

Principal Contributors

Allen Baker (202) 694-5290
Edward Allen (202) 694-5288

Editor

John Weber

Graphics, Layout and Text Design

Mary Fant

Approved by the World Agricultural Outlook Board. Summary released April 27, 2007.
Feed Situation and Outlook Yearbook may be accessed electronically via the ERS website at
www.ers.usda.gov.

Summary

Corn and Sorghum Prices Rise in 2006/07

U.S. total feed grain disappearance for 2006/07 is projected at 311 million tons, up from 304 million in 2005/06. Food, seed, and industrial (FSI) use is forecast at a record 95 million tons, boosted by ethanol demand. Exports are projected at 61 million tons, up from 60 million last year. The expected growth in utilization will exceed the growth in supply, leaving ending stocks less than half their 2005/06 level.

Feed and residual use of the four feed grains plus wheat in September-August 2006/07 is expected to be up 312,000 metric tons from the 165.6 million metric tons used in September-August 2005/06. The grain used per grain-consuming animal unit (GCAU) in 2006/07 is nearly unchanged from 2005/06 at 1.81 tons. Corn is expected to represent 90 percent of feed and residual use in 2006/07, down 4 percent from 2005/06.

U.S. corn production in 2006/07 was 10.5 billion bushels, down from last year's crop of 11.1 billion bushels, but still the third largest crop on record. The year-to-year decrease stems from a 3.5-million-acre decrease in planted area and a 4.5-million-acre decrease in area harvested for grain. The 2006/07 yield was 149 bushels per acre, up from 148 bushels per acre in 2005/06. Beginning 2006/07 corn stocks were 1,967 million bushels, down 147 million from the previous year. Projected 2006/07 total corn supply is 12,512 million bushels, down 725 million bushels from the previous year. Total corn utilization in 2006/07 is projected at a record 11,635 million bushels, up from 11,270 million in 2005/06. Utilization is forecast up for FSI and exports but down for feed and residual. With utilization higher than supply, ending stocks are projected to decrease 1,090 million bushels to 877 million bushels, the lowest ending stocks since 1995/96. The season average farm price is projected at \$3.00-\$3.20 per bushel, up sharply from \$2.00 per bushel in 2005/06.

Corn FSI use in 2006/07 is expected to total 3,535 million bushels, up from 2,981 million in 2005/06. FSI use would represent 30 percent of total corn use, up from 26 percent in 2005/06 and 25 percent in 2004/05. Corn used to make ethanol for 2006/07 is forecast at 2,150 million bushels, up 34 percent from 2005/06. In January 2007 (latest data available), ethanol production reported by the Department of Energy (DOE) was 375,000 barrels per day, up from 288,000 barrels in January 2006 as new plants have come on stream.

The 2006/07 sorghum crop was 278 million bushels, down from 393 million in 2005/06. Lower harvested area and yields are responsible for this year-to-year change. Total 2006/07 supply is 343 million bushels, down from 450 million in 2005/06. Total sorghum utilization is projected at 295 million bushels, down from 384 million last year. All uses of sorghum are expected to be down from last year. Ending stocks in 2006/07 are expected to be 48 million bushels, down from 66 million a year earlier. The season average farm price is projected at \$3.20-\$3.40 per bushel.

Barley production in 2006/07 was 180 million bushels, down from 212 million in 2005/06. Harvested area in 2006/07 was 3.0 million acres, down from 3.3 million acres in the previous year. The national average barley yield decreased from 64.8 bushels per acre in 2005/06 to 61.0 bushels per acre in 2006/07, further adding to the decline in production. Total forecast barley supply for 2006/07 is 303 million bushels, down from 346 million bushels the previous year. Total barley use is forecast at 235 million bushels in 2006/07, down from 238 million in 2005/06. The year-to-year change stems from slight declines in FSI use and exports as feed and residual use is up slightly. Barley ending stocks for 2006/07 are forecasted at 68 million bushels, down from 108 million bushels a year earlier. The season average barley farm price for 2006/07 is forecast at \$2.88 per bushel, compared with \$2.53 per bushel for 2005/06.

Total oats supply in 2006/07 is forecast at 251 million bushels, down from 264 million in 2005/06. Lower beginning stocks and production are the primary difference in the supply, which is down 13 million bushels from a year earlier. Total 2006/07 oats utilization is projected at 202 million bushels, down 9 million bushels from 2005/06 and the lowest level on record. Ending stocks for 2006/07 are forecast at 49 million bushels, down from 53 million the previous year. Average oats prices received by farmers in 2006/07 are expected to be \$1.85 per bushel, up from \$1.63 per bushel a year earlier.

The March 30 *Prospective Plantings* report indicated that producers intend to plant 90.5 million acres of corn in 2007. If realized, this would be up 15 percent from 2006 and the largest planted area since 1944. Sorghum growers intend to plant 7.1 million acres, up 9 percent from last year. Barley growers intend to plant 3.7 million acres for 2007, up 7 percent from a year earlier. Oats growers intend to plant 4.0 million acres, down 3 percent from a year earlier, and, if realized, the lowest planted acreage on record.

Hay production for 2006 was estimated at 142 million tons, down from 151 million tons in 2005. Acreage harvested in 2006 was 60.8 million acres, down from 61.7 million in 2005. Average 2006 yield for hay was 2.33 tons per acre, down 0.12 tons per acre from the previous year. Stocks of all hay on farms totaled 96 million tons on December 1, 2006, down 8 percent from the previous year. Prices for all hay are up in 2006/07. According to the March 31 *Prospective Plantings* report, producers expect to harvest 63.1 million acres of all hay in 2007, up 2.2 million from 2006.

Record world corn trade is projected for 2006/07 as import demand remains strong despite high prices. U.S. corn exports for the October-September 2006/07 trade year are forecast at 56.0 million tons, nearly the same as the previous year. Competition from Argentina was down early in the trade year due to a small corn crop there in 2006, but it is expected to increase in the later months after Argentina's harvest in March and April 2007. Corn exports from South Africa are expected to decline in 2006/07.

World coarse grain consumption is expected to increase 3 percent in 2006/07, exceeding 1 billion tons for the first time. This is the fourth straight year of demand growth. Increasing global consumption of coarse grains is expected to reduce world ending stocks 26 percent to 123 million tons in 2006/07, the lowest level in over 30 years.

World coarse grain production in 2006/07 is expected to decline less than 1 percent from the level of the previous year. Foreign coarse grain production is forecast up 2 percent as South America's production leaps 22 percent and Sub-Saharan Africa's production increases 7 percent despite devastating drought in South Africa. China is having another record coarse grain crop, up 3 percent over 2005/06. These increases more than offset another poor crop in the EU-25 in 2006/07, down 4 percent from 2005/06, and a 51-percent drought-induced plummet in Australia. Global beginning stocks of coarse grains in 2006/07 were estimated down 7 percent from the previous year, following strong growth in use in 2005/06. Reduced beginning stocks and slightly lower production leave global coarse grain supplies in 2006/07 down year-to-year.

Feed Grain Supply and Use

More Ethanol Use and Exports Result in Higher Feed Grain Use in 2006/07

Record utilization leads to a projected decrease in 2006/07 feed grain ending stocks. Even though 2006/07 feed grain utilization is projected higher, feed and residual utilization is expected to decline. Lower stocks led to higher prices for all feed grains in 2006/07.

Total feed grain disappearance is projected at 311 million tons in 2006/07, up from 305 million in 2005/06. The year-to-year increase is from higher food, seed, and industrial use (FSI) and exports. Record ethanol production is driving most of the increase in FSI. FSI in 2006/07 is projected at 95 million tons, up from 82 million tons in 2005/06. Feed grain exports are projected at 61 million tons, up from 60 million tons the previous year. Feed and residual use in 2006/07 is projected at 155 million tons, down from 163 million tons the previous year.

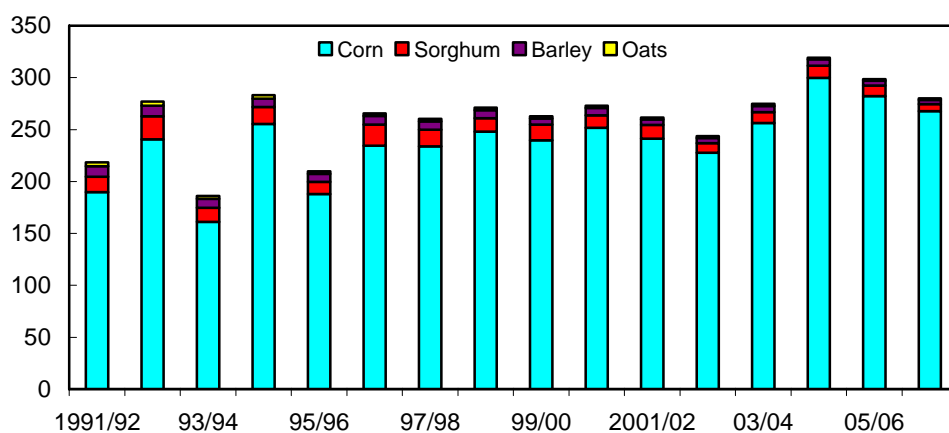
Total feed grain supply in 2006/07 was down 22 million tons from the 359 million tons available in 2005/06. Feed grain production and beginning stocks were also down from the previous year. Beginning stocks in 2006/07 were 55 million tons, and imports are expected to total 2 million tons.

With feed grain utilization increasing and supplies decreasing, ending stocks are projected to decline. Ending stocks for 2006/07 are projected at 26 million tons, the lowest since 1995/96. Higher utilization and lower stocks in 2006/07 led to higher feed grain prices for the entire feed grain complex.

Figure 1

U.S. feed grain production

Mil. metric tons



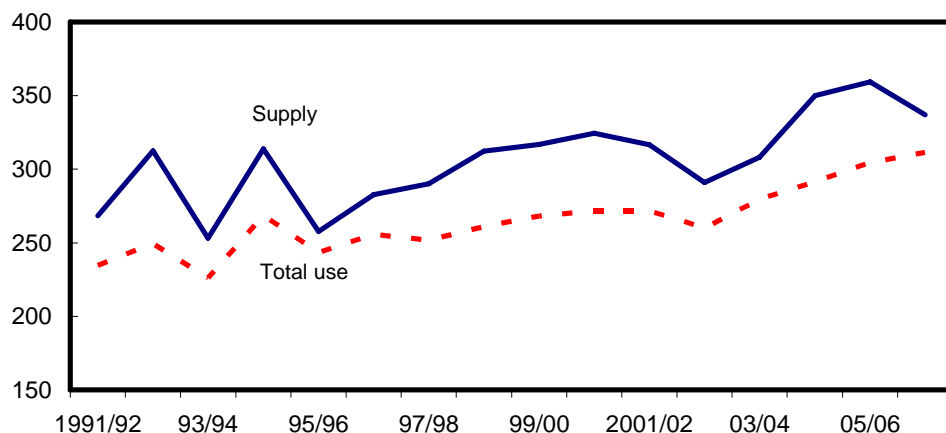
Source: USDA, *Grain: World Markets and Trade (Grain Circular)*.

The *Prospective Plantings* report for 2007 indicates that as of early March, farmers intended to plant 90.5 million corn acres, 12.1 million acres more than was planted in 2006. If realized, this would be the largest area planted since 1944. Prospective plantings for sorghum, barley, and oats in 2007 are 7.1 million acres, 3.7 million acres, and 4.0 million acres, respectively. Sorghum and barley planted area is up from the previous year but oats planted area is down.

Figure 2

U.S. feed grain supply and use

Mil. metric tons

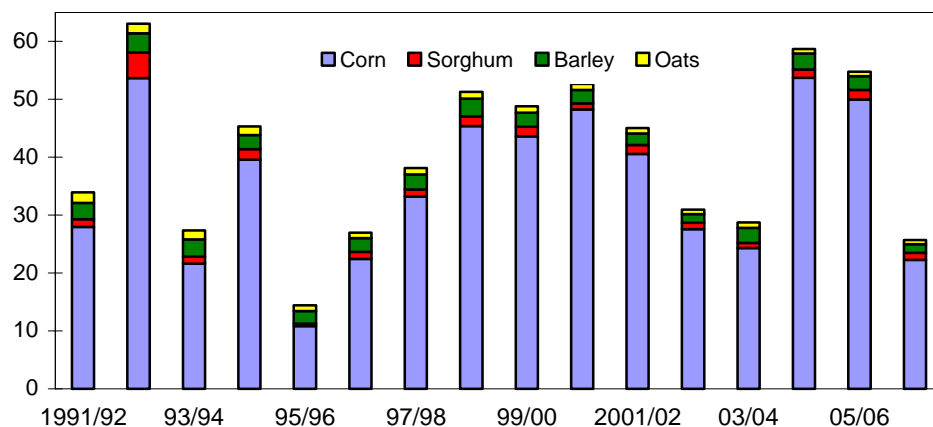


Source: USDA, World Agricultural Outlook Board, WASDE.

Figure 3

Ending stocks of feed grains

Mil. metric tons



Sources: USDA, Foreign Agricultural Service, *Production, Supply and Distribution (PS&D)*, and USDA, *Grain: World Markets and Trade (Grain Circular)*.

Corn Prices Strengthen in 2006/07 With Higher Utilization and Lower Expected Ending Stocks

Corn supplies for 2006/07 are down year-to-year, with lower beginning stocks and less production as planted area fell in 2006. Higher utilization from increased food, seed, and industrial use and exports more than offsets lower feed and residual use, leaving projected ending stocks of corn at their lowest and prices, their highest since 1995/96

Corn Production Down in 2006

Corn production in 2006 was 10.5 billion bushels, down from the 2005/06 crop of 11.1 billion bushels, but still the third largest crop on record. The year-to-year decrease stems from a 3.5-million-acre decrease in planted area and a 4.5-million-acre decrease in area harvested for grain. The 2006/07 yield was 149.1 bushels per acre, up from 148 bushels per acre in 2005/06. Beginning corn stocks in 2006/07 were 1,967 million bushels, down 147 million from the previous year. Projected total corn supply in 2006/07 is 12,512 million bushels, down 725 million bushels from 2005/06.

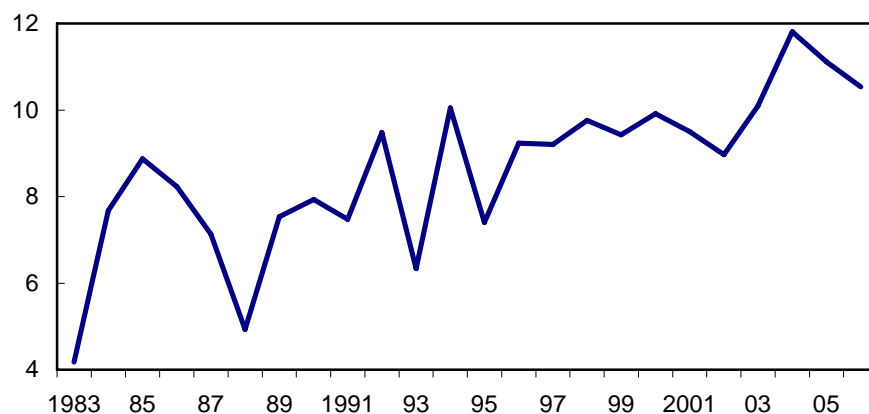
Regionally, estimated corn yields this year were higher than yields in 2005 in the eastern Corn Belt, Ohio Valley, and middle Atlantic Coast where frequent rainfall and near normal temperatures prevailed throughout much of the growing season, which helped to maintain good growing conditions. Corn yields in 2006/07 in the northern Great Plains and adjacent areas of the Corn Belt, as well as in the central Great Plains and Southeast, were below those of the previous year due to scarce precipitation and above-normal temperatures.

Planted corn area totaled 78.3 million acres in 2006/07, down 4 percent from 2005/06 as growers switched to less input-intensive crops due to high fertilizer and

Figure 4

Corn production

Bil. bushels

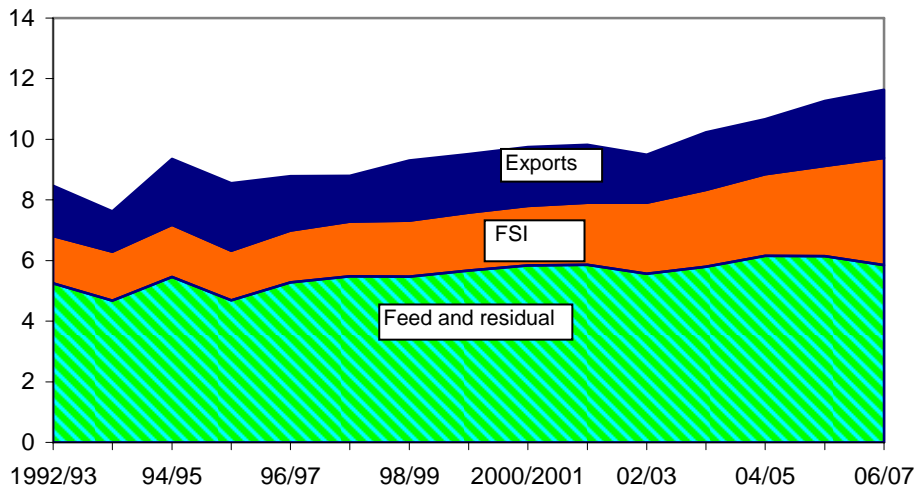


Source: USDA, National Agricultural Statistics Service, *Quick Stats*.

Figure 5

Corn disappearance by type of use

Bil. bushels



Source: USDA, World Agricultural Outlook Board, WASDE.

fuel costs. Corn planted acreage this year was down from 2005 across the Corn Belt, Great Plains, Delta, and Pacific Coast, with the exception of Minnesota, North Dakota, and South Dakota. The largest decrease in planted corn acres occurred in Illinois, where growers planted 800,000 fewer acres than the record high in 2005/06. Area harvested for grain, at 70.6 million acres, is down 6 percent from 2005. In Illinois, harvested area is down 800,000 from last year, while in North Dakota, growers harvested a record high 1.40 million acres, up 200,000 acres from the previous year.

The 2006 corn objective yield data indicated the second highest ear count on record for the combined 10 objective yield States (Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, Ohio, South Dakota, and Wisconsin), down 1 percent from the record high set in 2004. Indicated ears per acre in 2006 were higher than in 2005 in all objective yield States, except Kansas and South Dakota. The indicated number of ears per acre in Illinois was the highest on record.

Total Utilization Rises to Record

Total corn utilization in 2006/07 is projected at a record 11,635 million bushels, up from 11,270 million bushels in 2005/06. This year-to-year increase stems from increases in food, seed, and industrial use (FSI) and exports. FSI use is projected at a record 3,535 million bushels, up from 2,981 million bushels in 2005/06. Record ethanol production is behind this year-to-year increase. Feed and residual use is projected at 5,850 million bushels, down from 6,141 million a year earlier. Feed and residual use during the first half of 2006/07 is estimated at 3,705 million bushels, down 4 percent from the same period in 2005/06. Corn exports in 2006/07 are projected to increase to 2,250 million bushels from 2,147 million bushels in 2005/06. This is the highest level of U.S. corn exports since 1989/90. Reduced foreign competition and lower global feed-quality wheat supplies boosted U.S. corn exports and export sales during the first half of 2006/07.

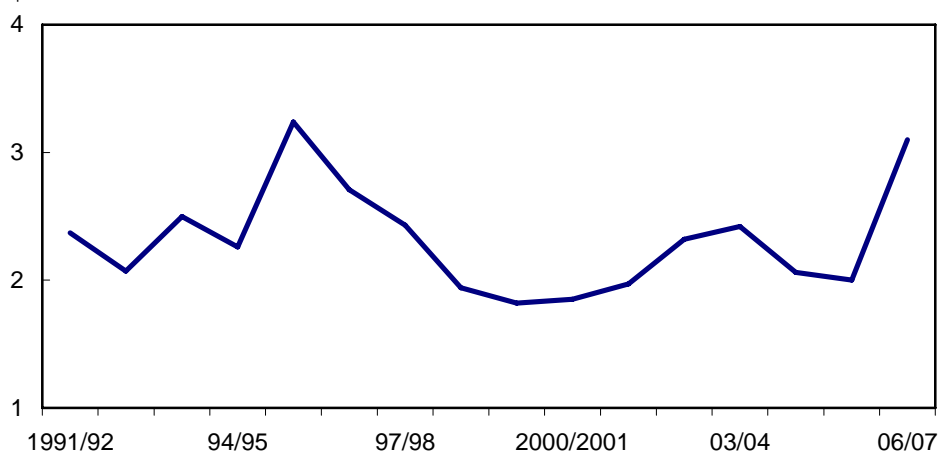
Corn Prices To Decline With Large Supplies

With utilization rising and supplies falling, corn ending stocks in 2006/07 are projected to decrease 1,090 million bushels to 877 million bushels. At this level, this year's ending stocks of corn would be the lowest since 1994/95. Prospects for smaller ending stocks have led to higher prices. The 2006/07 season average price of corn received by producers is projected at \$3.00-\$3.20 per bushel, up from \$2.00 per bushel in 2005/06. The benchmark Central Illinois cash corn price was \$3.76 per bushel in March 2007, down from \$3.90 per bushel in February 2007, but well above \$2.04 per bushel in March 2006. Year-to-date Central Illinois cash corn prices have averaged \$3.33 per bushel from September 2006 to March 2007, up from \$1.88 per bushel for the same period a year earlier. Central Illinois cash corn prices have also been well above the actual prices received by producers during 2006/07. The simple average of monthly prices received by producers during September 2006 through March 2007 was \$2.92 per bushel. The lower price received reflects the substantial portion of 2006 production forward priced ahead of the sharp rise in prices during this marketing year.

Figure 6

Season-average corn prices received by farmers

\$/bushel

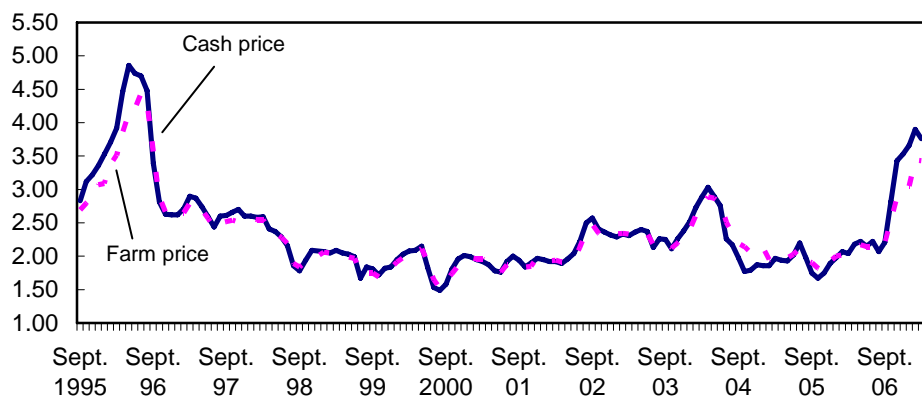


Source: USDA, World Agricultural Outlook Board, WASDE.

Figure 7

**U.S. corn: Central Illinois cash and average farm price, monthly,
September 1995-March 2007**

\$/bushel

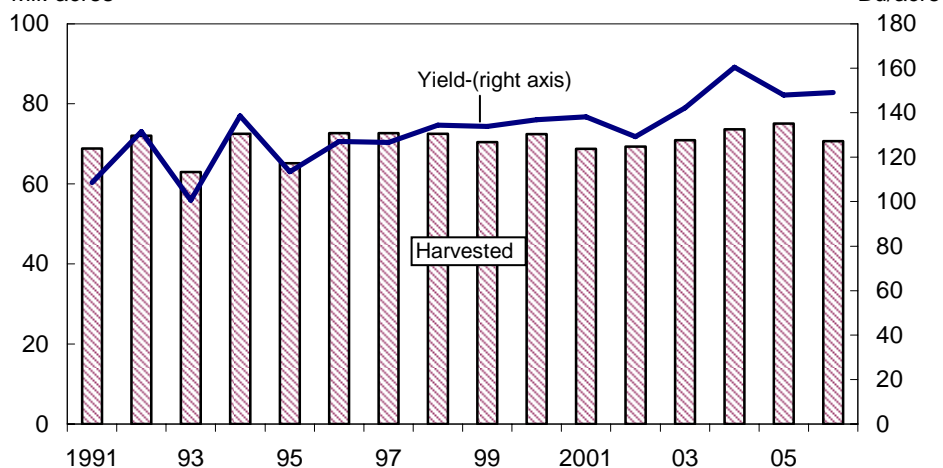


Sources: USDA, Agricultural Marketing Service, *Weekly Grain Market News Summary*, and USDA, Economic Research Service, *Feed Grains Database*.

Figure 8

Corn harvested acres and yields

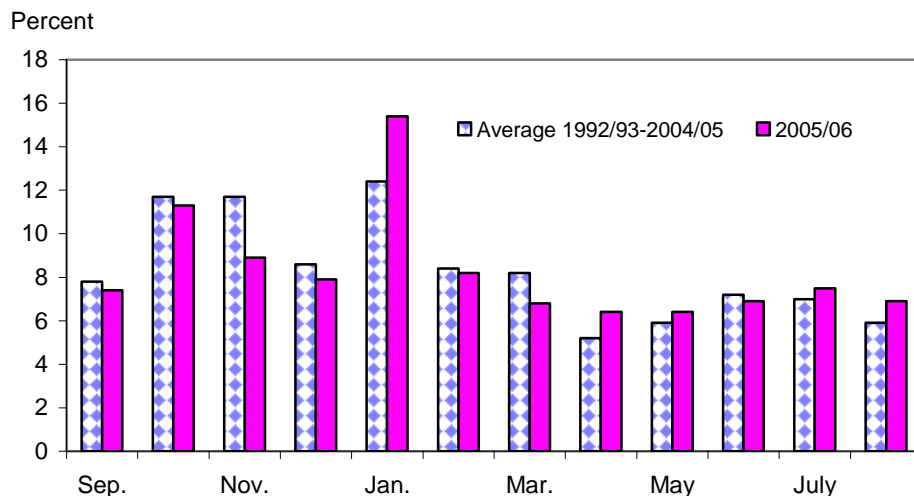
Mil. acres



Source: USDA, National Agricultural Statistics Service, *Quick Stats*.

Figure 9

Percent of corn marketed by month



Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Prospective Corn Plantings up 15 Percent in 2007

In March, producers indicated that they intended to plant 90.5 million corn acres in 2007, up 15 percent from 2006 and the largest level since 1944. Expected acreage is up in nearly all States as favorable corn prices, caused by increased demand from ethanol producers and strong exports sales, are encouraging farmers to plant more acres to corn. The increase in intended corn acres is partially offset by lower expected acres of soybeans in the Corn Belt and Great Plains and fewer expected acres of cotton and rice in the Delta and Southeast. Illinois farmers intend to plant a record high 12.9 million acres of corn in spring 2007, up 1.6 million acres from spring 2006. North Dakota and Minnesota growers also expect to plant record high corn acres in 2006/07, up 910,000 and 600,000 acres, respectively.

Corn farmers in the 10 major corn-producing States (Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, Ohio, South Dakota, and Wisconsin) intend to plant 69.5 million acres in 2007, up 12 percent from the 62.2 million acres planted in 2006. Iowa continues to show the largest corn acreage this year at 13.9 million acres, up 1.3 million acres from last year.

Sorghum Production Decreases 29 Percent in 2006/07

Sorghum production in 2006/07 declined from that in 2005/06 and was the lowest since 1956. Total sorghum use is expected to decline because of the lower levels of production and supplies. Given strong demand and tighter feed grain supplies, sorghum prices are forecast to be record high.

2006 Sorghum Production Declines

The 2006 sorghum crop was 278 million bushels, down from 393 million bushels in 2005/06. Lower harvested area and yields are responsible for this year-to-year decline. The number of acres planted in 2006 was 6.5 million, up 68,000 acres from 2005. The average sorghum yield was down 12.3 bushels per acre from 2005 at 56.2 bushels per acre. Harvested area in 2006/07 was 4.9 million acres, down from 5.7 million the previous year. The acres harvested for grain are at the lowest level since 1939, while production is at the lowest level since 1956. Beginning stocks were 66 million bushels, and total 2006/07 supply is 343 million bushels, down from 450 million bushels in 2005/06.

Kansas led the Nation in area planted for all purposes and grain production, while Texas led the Nation in silage production. Area harvested for grain in 2006 declined from that in 2005 in 15 of the 21 reported States, with Texas showing the largest decline at 30 percent and Kansas decreasing 4 percent. Yields were at or below last year's level in all States except Arkansas, California, Missouri, Pennsylvania, and Tennessee, with substantial declines experienced throughout the Great Plains. The yield in the two largest producing States of Kansas and Texas dropped 17 and 12 bushels per acre, respectively, from 2005.

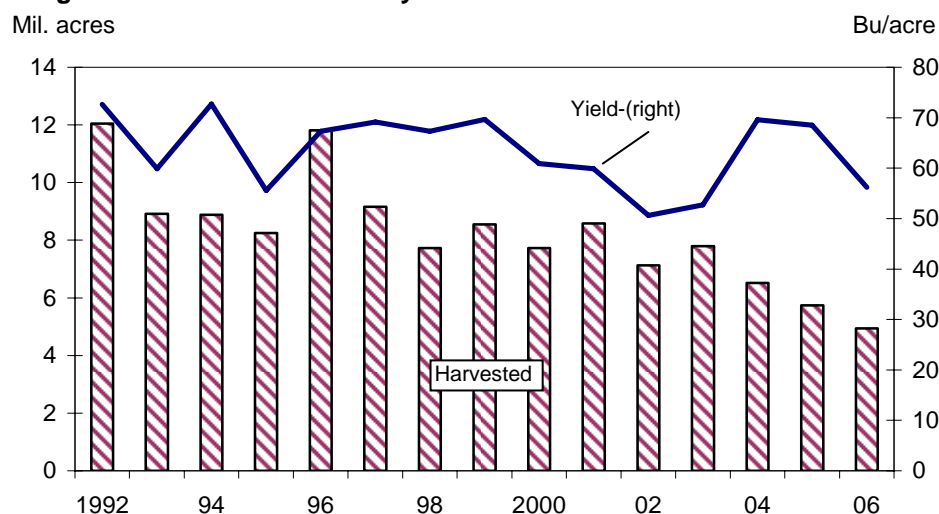
Total Use Projected 23 Percent Lower

Total sorghum utilization for 2006/07 is projected at 295 million bushels, down from 384 million in 2005/06. Feed and residual use is forecast at 110 million bushels this year, down from 140 million bushels last year. Forecast food, seed, and industrial (FSI) use in 2006/07 is 45 million bushels, down 5 million bushels from 2005/06. Ethanol is the primary FSI category for sorghum. Corn is the dominant starch source used in U.S. ethanol plants, but sorghum is the primary grain used in some plants, particularly in sorghum-production regions. Some ethanol plants use either corn or sorghum depending on price and availability.

Forecasted sorghum exports are 140 million bushels in 2006/07, down from 195 million bushels in 2005/06 and the lowest since 1971. Mexico is by far the most important destination for U.S. sorghum, followed by Japan. From September 2006 through February 2007 (the last month for which Census has export data), total U.S. sorghum exports were 79 million bushels; Mexico and Japan accounted for 41 percent and 25 percent of this total. Sorghum ending stocks in 2006/07 are expected to be 48 million bushels, down from 66 million bushels a year earlier.

Figure 10

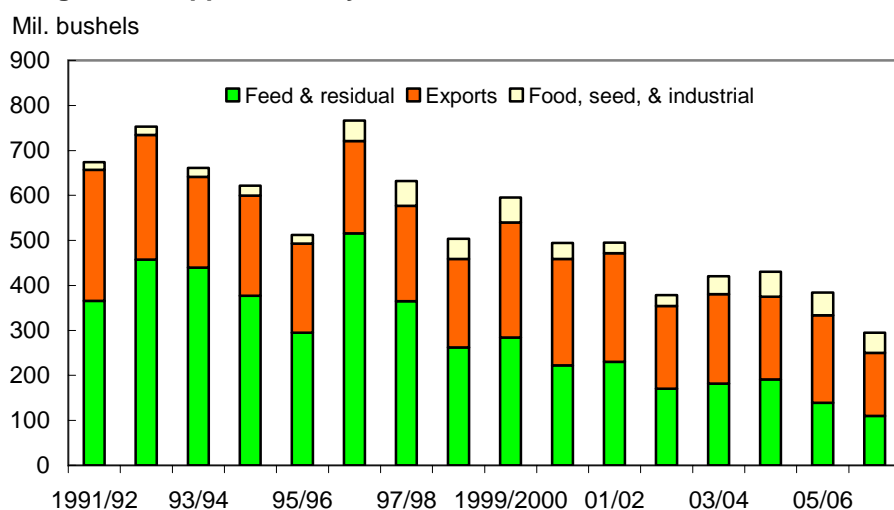
Sorghum harvested acres and yields



Source: USDA, National Agricultural Statistics Service, *Quick Stats*.

Figure 11

Sorghum disappearance by use



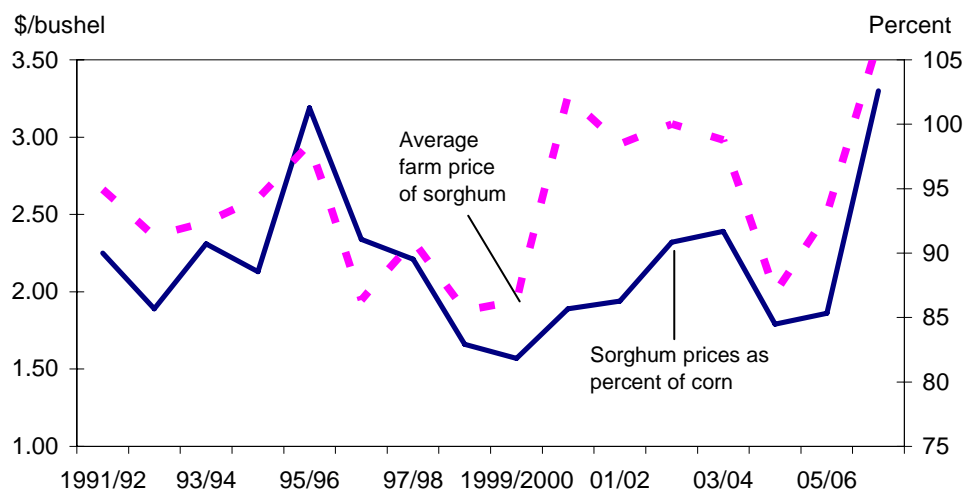
Source: USDA, World Agricultural Outlook Board, *WASDE*.

Sorghum Prices Stronger

The season average sorghum farm price for 2006/07 is forecast at a record \$3.20-\$3.40 per bushel, compared with \$1.86 per bushel in 2005/06. Traditionally, sorghum prices average 92-93 percent of the corn price, but this is an unsteady relationship. For the 2006/07 marketing year, corn producers forward priced a substantial part of their production and, as a result, ended up receiving lower prices than were available in the cash market. Forward pricing opportunities are more limited for sorghum

Figure 12

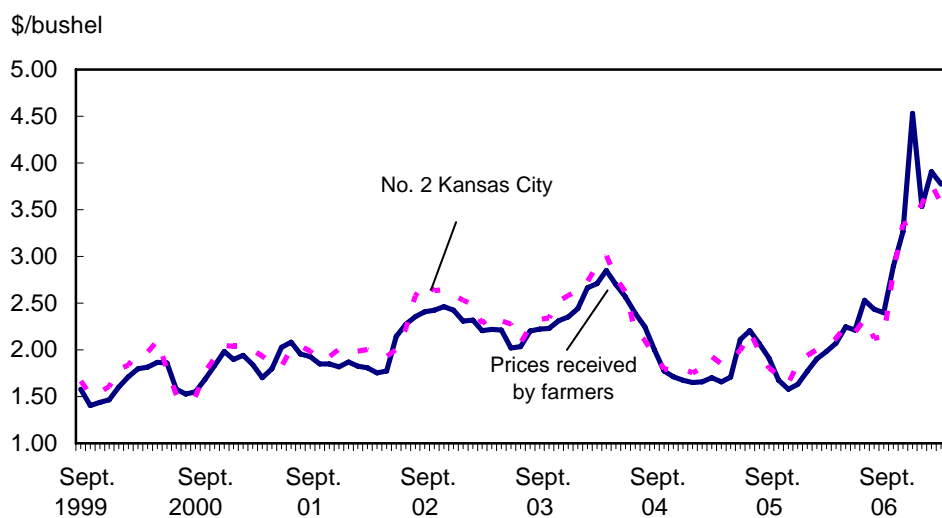
Sorghum prices received by farmers and percent of corn price



Sources: USDA, Economic Research Service, *Feed Grains Database*, and USDA, World Agricultural Outlook Board, *WASDE*.

Figure 13

U.S. sorghum prices: Kansas City cash and average farm price, monthly, September 1999-March 2007



Sources: USDA, Agricultural Marketing Service, *Weekly Grain Market News Summary*, and USDA, National Agricultural Statistics Service, *Agricultural Prices*.

because there is no sorghum futures market. Thus, sorghum producers sell most of their production after harvest on the cash market. This year, they benefited from the substantial rise in prices after August 2006. Sorghum prices received by farmers in 2006/07 are expected to average 106-107 percent of the price received by farmers for corn.

Sorghum Acres Projected up 9 Percent in 2007

According to the 2007 *Prospective Plantings* report, growers intend to plant 7.1 million acres of sorghum, up 587,000 acres from 2006. Sorghum acres are expected to increase in States located in the lower Mississippi Valley, including Arkansas, Mississippi, and Louisiana. The largest increase is expected in Texas, where growers intend to plant 450,000 acres more than in the previous year. With corn use shifting toward ethanol production, the expected sorghum increase in Texas is driven by higher feed grain prices and increased feeding demand for grain sorghum. Kansas continues to have the largest area of sorghum planting intentions at 2.8 million acres, up 2 percent from 2006. Declining sorghum acres are expected in 10 States, with the largest decrease expected in Nebraska, where the intended sorghum area is 260,000 acres, down 110,000 from 2006.

Barley Production Declines in 2006

Barley production in 2006 is down from the level in 2005. Forecast utilization is down slightly due to reduced food, seed, and industrial use and lower exports. The all-barley price is projected higher as compared to a year earlier as strong feed grain prices have sharply boosted feed barley prices during 2006/07.

Barley production in 2006 was 180 million bushels, down from 212 million bushels in 2005. Harvested area was 3.0 million acres, down from 3.3 million acres in 2005. The average yield decreased from 64.8 bushels per acre in 2005 to 61.0 bushels per acre in 2006, further adding to the decline in production. The ratio of harvested-to-planted area is 85 percent, up from 84 percent in 2005/06.

Area harvested for grain in 2006 was at the lowest level since 1885, while production was at the lowest level since 1936. Harvested area is down in most States, including the four States with the largest acreage. Acreage harvested for grain was down 90,000 acres in Idaho, 80,000 acres in Montana, 65,000 acres in North Dakota, and 15,000 acres in Washington. Production was down throughout the Great Plains and Rocky Mountains, partly due to the decreased acreage but also because yields were lower in these areas due to dry conditions during most of the growing season. However, yields are higher than last year in the Pacific Northwest, Corn Belt, Ohio River Valley, and most Atlantic Coast States. Record high yields were set or tied in Kentucky, Maryland, North Carolina, and Pennsylvania.

Beginning barley stocks in 2006/07 were 108 million bushels, down from 128 million bushels in 2005/06. Imports are forecast at 15 million bushels this year, up from 5 million bushels a year earlier. Total forecast barley supply in 2006/07 is 303 million bushels, down from 346 million in 2005/06.

Total Utilization Expected To Decline Slightly

Total barley use for 2006/07 is forecast at 235 million bushels, down from 238 million bushels in 2005/06. The bulk of this year-to-year change stems from slight declines in food, seed and residual use (FSI) and exports. FSI is forecast at 155 million bushels in 2006/07, down 3 million bushels from 2005/06. Barley used for malt production is the main element of FSI. Exports are forecast at 25 million bushels in 2006/07, also down 3 million from the previous year. Feed and residual use in 2006/07 is forecast at 55 million bushels, up 3 million bushels in 2005/06. Barley ending stocks in 2006/07 are forecasted at 68 million bushels, down from 108 million bushels in 2005/06.

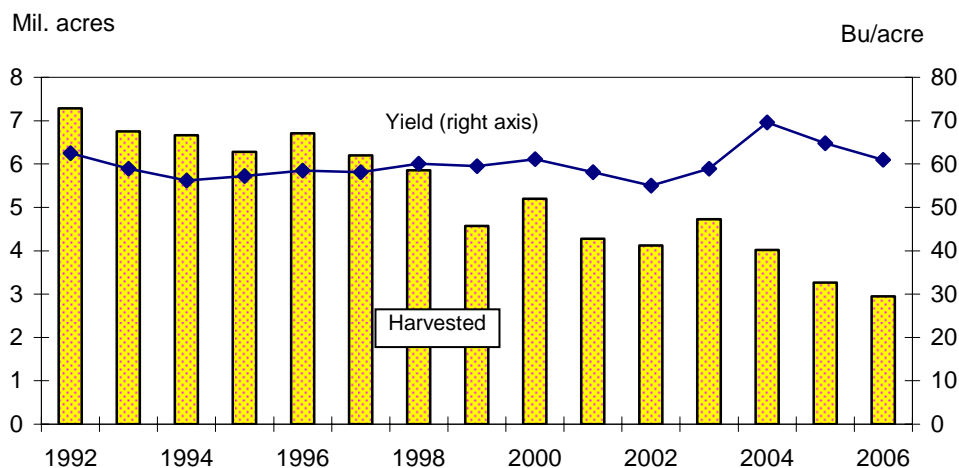
Barley Prices up in 2006/07

The season average price received by producers for barley in 2006/07 is forecast at \$2.88 per bushel, compared with \$2.53 per bushel in 2005/06. From June 2006 through March 2007, the simple average price received for feed barley was \$2.63 per bushel, compared with \$1.84 per bushel for the same period a year earlier; the simple average price received for malting barley was \$2.99 per bushel compared with \$2.76 per bushel for the same time period a year earlier. The spread between malting and feed barley prices has averaged \$0.36 per bushel so far this year, down

from \$0.92 last year. Much of the malting barley was priced under contract ahead of planting last spring while feed barley was sold after harvest and benefited from the sharp rise in feed grain prices since last fall.

Figure 14

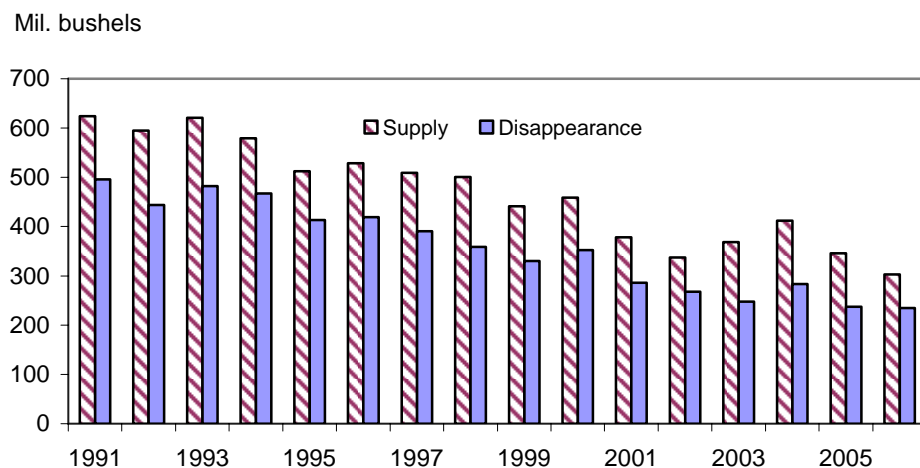
Barley harvested acres and yields



Source: USDA, National Agricultural Statistics Service, *Quick Stats*.

Figure 15

Barley total supply and disappearance



Source: USDA, World Agricultural Outlook Board, *WASDE*.

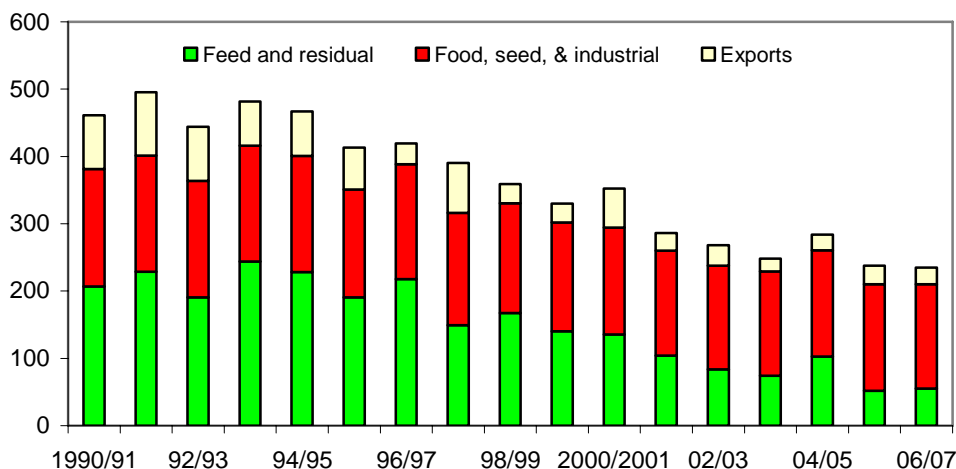
Barley Plantings To Increase 7 Percent in 2007

According to the 2007 *Prospective Plantings* report, barley growers intend to plant 3.7 million acres in 2007, up 7 percent from 2006. If realized, this will be the second lowest barley planted acreage on record. In North Dakota, expected area planted to barley in 2007 is 1.3 million acres, up 18 percent from the record low in 2006. Montana's area is expected to increase 4 percent to 800,000 acres in 2007. Planted area in Idaho and Washington in 2007 is expected to be up 4 and 10 percent, respectively. Barley growers in Oregon, Utah, Arizona, Colorado, South Dakota, Delaware, and Maryland also expect to plant more acres in 2007 than in 2006, while the acreage in California and Minnesota is expected to decline to record lows.

Figure 16

Barley disappearance by type of use

Mil. bushels

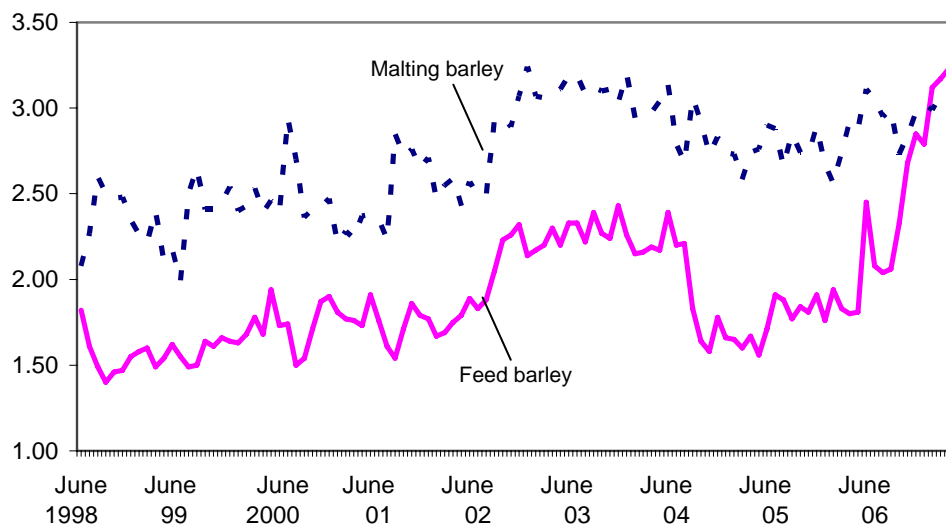


Source: USDA, World Agricultural Outlook Board, WASDE.

Figure 17

Monthly prices received by farmers, June 1998-March 2007

\$/bushel



Sources: USDA, Agricultural Marketing Service, *Weekly Grain Market News Summary*, and USDA, Economic Research Service, *Feed Grains Database*.

Total Oats Supply Down in 2006/07

With lower production, 2006/07 oats supplies and utilization are down again year-to-year. Ending stocks are forecast to decline and prices to rise.

Total oats supply in 2006/07 is forecast at 251 million bushels, down from 264 million bushels in 2005/06 as lower carryin and production more than offset higher projected imports. Production for 2006 was a record low 93.8 million bushels, down 18 percent from 2005. Harvested area in 2006 was down 247,000 acres from 2005, to 1.6 million acres. The largest decline occurred in North Dakota, where area harvested for grain decreased 120,000 acres from the previous year. U.S. area harvested for grain is at a record low, and area planted to grain is the second lowest level on record. The average oat yield was 59.5 bushels per acre, down 3.5 bushels per acre from 2005.

Compared with yields last year, yields this year declined in nearly all States except for those in the eastern Great Lakes region, Ohio Valley, and Pacific Northwest. Yields in California, Oregon, and Washington were up from 2005, with the largest increase in Oregon, where yields were up 17 bushels per acre from the previous year. The largest declines in yield occurred in the northern and central Great Plains, due to hot, dry conditions. The southern Atlantic Coast and Southeast regions were also plagued with dry conditions during the growing season, which reduced yields.

Beginning oats stocks were 53 million bushels in 2006/07, down from 58 million a year earlier. Imports in 2006/07 are forecast at 105 million bushels, up from 91 million bushels in 2005/06. Imports are expected to be up because Canada had a larger crop in 2006 than in 2005.

Total Utilization Projected Lower

Total 2006/07 oats utilization is projected at 202 million bushels, down 9 million bushels from the level in 2005/06 and the lowest level on record. The year-to-year decline stems from a 11-million-bushel drop in feed and residual from 2005/06. At the forecast 125 million bushels, 2006/07 feed and residual use would be the lowest on record. Exports, forecast at 2 million bushels, are nearly unchanged in 2006/07. Food, seed, and industrial use is forecast at 75 million bushels, just 1 million higher than in the previous year. Ending stocks in 2006/07 are forecast at 49 million bushels, down from 53 million bushels in 2005/06.

Prices Increase in 2006/07

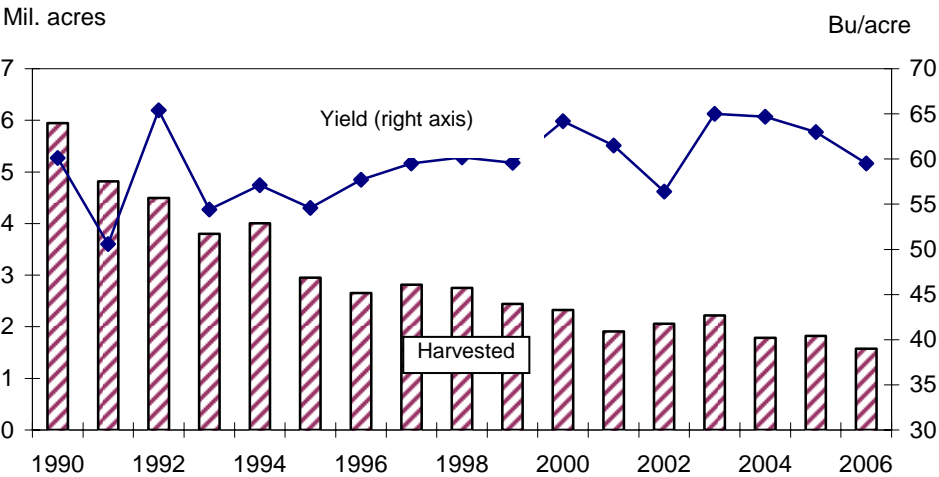
Average oats prices received by farmers in 2006/07 are expected to be \$1.85 per bushel, up from \$1.63 per bushel in 2005/06. Projected oats prices are also above the 5-year average of \$1.60 per bushel.

Prospective Plantings Down in 2007

In March, farmers indicated that they intended to plant 4 million acres to oats in 2007, down 139,000 acres from last year. If realized, this will be the lowest planted oats acreage on record. Area planted to oats is expected to decrease or remain unchanged in 20 States, including most States in the northern and central Rocky

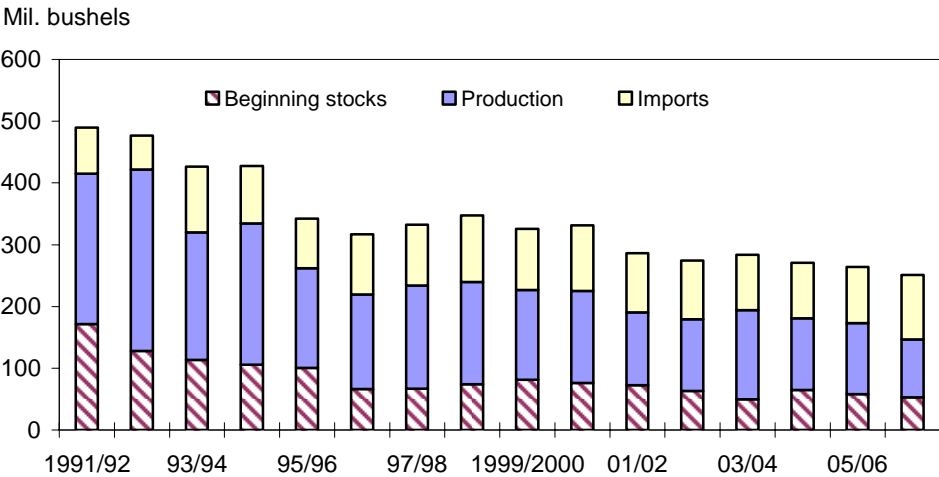
Mountains, central Corn Belt, and Ohio Valley. The largest decrease is expected in Iowa, where the intended planted oats area is 140,000 acres, down 70,000 acres from 2006. Large decreases are also expected in South Dakota and Wisconsin, down 13 percent and 16 percent, respectively, from the previous year. The largest increase is in North Dakota where producers intend to plant 530,000 oats acres, an increase of 110,000 acres from 2006. A sizable increase is also expected in Oklahoma, where hay and forage supplies are short.

Figure 18
Oats harvested acres and yields



Source: USDA, National Agricultural Statistics Service, *Quick Stats*.

Figure 19
Oats supply

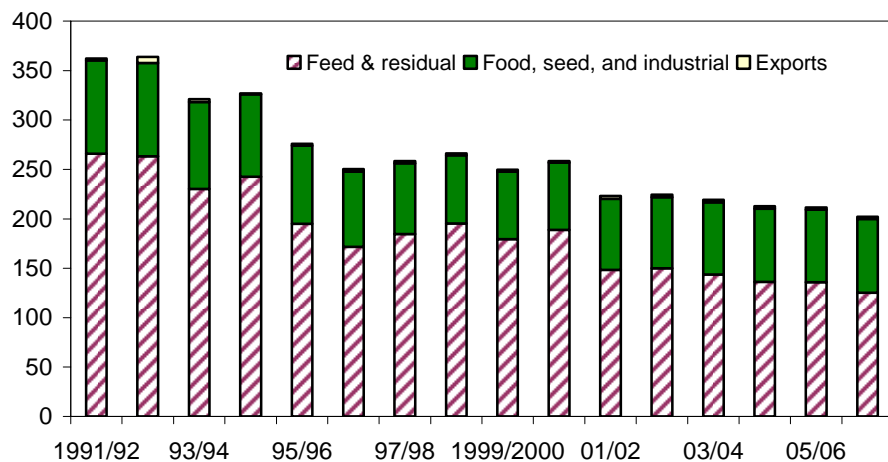


Sources: USDA, Economic Research Service, *Feed Grains Database*, and USDA, World Agricultural Outlook Board, *WASDE*.

Figure 20

Total use of oats over time

Mil. bushels

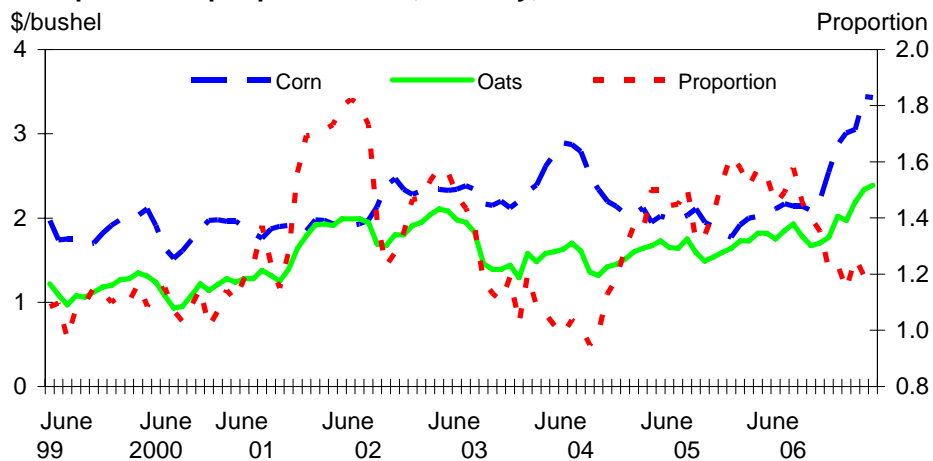


Source: USDA, World Agricultural Outlook Board, WASDE.

Figure 21

U.S. average prices of oats and corn plus oat price as a proportion of the corn price on a per pound basis, monthly, June 1999-March 2007

\$/bushel



Source: USDA, Economic Research Service, *Feed Grains Database*.

Hay Situation and Outlook

Hay Production Decreases in 2006

Hay production in 2006 and hay stocks (as of December 1, 2006) are both down from the previous year. Prices for all hay are stronger in 2006/07 than in 2005/06, up 12 percent for the first 11 months of the marketing year as compared with the same months of 2005/06.

Stocks of all hay on farms totaled 96 million tons on December 1, 2006, down 8 percent from the previous year. Disappearance of hay from May 2006-December 2006 totaled 66.6 million tons, compared with 73.6 million tons for the same period a year ago.

Compared to December 1, 2005, hay stocks decreased in most of the eastern Rocky Mountains, Great Plains, and Southeast States. Drier conditions prevailed in many of these States, resulting in lower hay production and increased supplemental feeding of hay. Meanwhile, stocks increased year-to-year in several States throughout the Northeast and Intermountain region as a result of favorable growing conditions that allowed farmers to get multiple cuttings of hay and provided good pasture and grazing conditions.

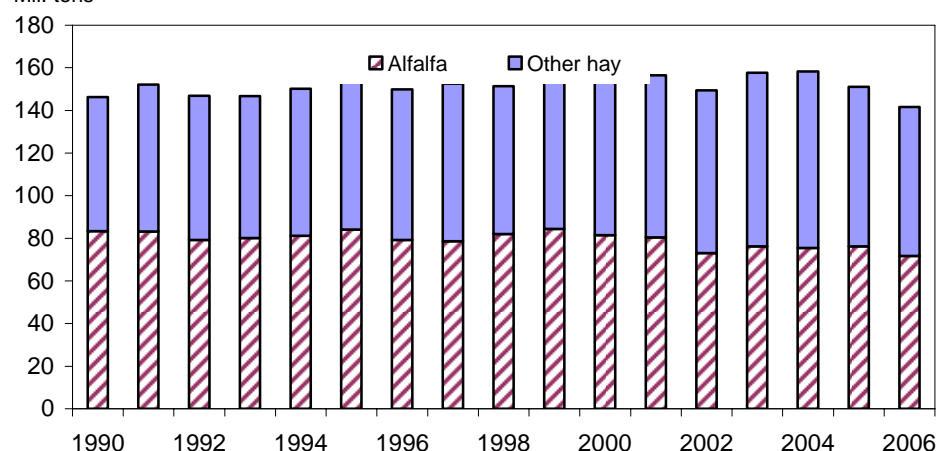
Roughage-consuming animal units (RCAU) in 2006/07 are estimated at 72.3 million, up from 72.1 million in 2005/06. Hay stocks on farms per RCAU on December 1, 2006, were 1.33 tons, compared with 1.46 tons per RCAU a year earlier.

Hay production for 2006 is estimated at 142 million tons, down from 151 million tons in 2005. Acreage harvested in 2006/07 is 60.8 million acres, down from 61.7 million acres in 2005/06. Average 2006/07 yield is 2.33 tons per acre, down 0.12

Figure 22

Hay production

Mil. tons



Sources: USDA, National Agricultural Statistics Service, *Crop Production Summary* and *Quick Stats*.

tons from the yield in 2005/06. California was the largest U.S. producer of all hay in 2006 with production of 9 million tons, down 158,000 tons from 2005. Texas, Missouri, and Kansas were the second, third, and fourth largest hay producers in 2006.

Alfalfa hay production in 2006 totaled 71.7 million tons, down from 76.1 million tons in 2005. Harvested alfalfa area, at 21.4 million acres in 2006, is 5 percent below the level in 2005. Alfalfa hay area harvested is at the lowest level since 1951. Yields averaged 3.35 tons per acre in 2006, down 0.04 tons from 2005. California continues to be the largest alfalfa-producing State followed by Idaho, Wisconsin, and Iowa.

States in the northern Rocky Mountains and northern Great Plains showed the largest decrease in harvested alfalfa hay acreage from 2005 to 2006. In 2006, South Dakota harvested 600,000 acres less than in 2005 and Montana and North Dakota both decreased harvested acres by 200,000 as a result of dry conditions. Wisconsin showed the largest increase this year, up 100,000 acres from last year. Yields were lower throughout the Great Plains as a result of less than favorable conditions during 2006.

Growers seeded 3.18 million acres of alfalfa and alfalfa mixtures during 2006, down 3 percent from the 2005 seeded area of 3.29 million acres. The largest decrease occurred in Wisconsin, down 150,000 acres from 2005. New seedings of alfalfa and alfalfa mixtures will normally be harvested for the first time in the year following planting.

Production of all other hay in 2006 totaled 70.0 million tons, down 7 percent from 2005. Area harvested in 2006, at 39.4 million acres, is slightly above the level in 2005. The average yield this year is estimated at 1.78 tons per acre, down 0.13 tons per acre from a year earlier.

Extremely dry weather conditions during the summer of 2006 resulted in emergency haying of Conservation Reserve Program (CRP) land in 30 States. The majority of the CRP land approved for emergency haying by USDA was located in the Great Plains. Oklahoma and Missouri increased harvested acres of other hay by 200,000 acres from 2005 to 2006. In South Dakota, other hay harvested area in 2006 was down 300,000 acres from 2005. Drought conditions contributed to lower yields across much of the northern Rocky Mountains, Great Plains, and Southeast. Yields in Georgia and Mississippi are down 1.2 tons and 0.9 tons, respectively, as hay crops suffered most of the growing season from harsh weather conditions. Yields across most of the northern Atlantic Coast States increased from 2005 to 2006 due to favorable late season weather.

Corn silage production was 105 million tons in 2006, down 2 percent from 2005. U.S. silage yield averaged 16.2 tons per acre in 2006, down 1.8 tons from 2005. However, area harvested for silage this year, at 6.48 million acres, was up 9 percent from a year earlier. Sorghum silage production in 2006 was 4.64 million tons, up 10 percent from 2005. Area cut for silage was 347,000 acres this year, up 12 percent from the previous year. Sorghum silage acres were unchanged from 2005

in both Kansas and Texas, but were 50 percent higher in Nebraska and South Dakota. Silage yields averaged 13.4 tons per acre in 2006, down 0.2 tons per acre from 2005.

All hay prices received by farmers during May 2006 through March 2007 averaged \$109.64 per ton, up from \$97.65 per ton in the same period a year earlier. The season average farm price for all hay during the May-April 2005/06 marketing year was \$98.20 per ton, up from \$92.00 per ton in 2004/05.

Alfalfa hay prices received by farmers averaged \$113.82 per ton during the period from May 2006 to March 2007, up from \$103.09 for the same period in 2005/06. The season average farm price for alfalfa was \$104.00 per ton in 2005/06, compared with \$98.60 per ton in 2004/05.

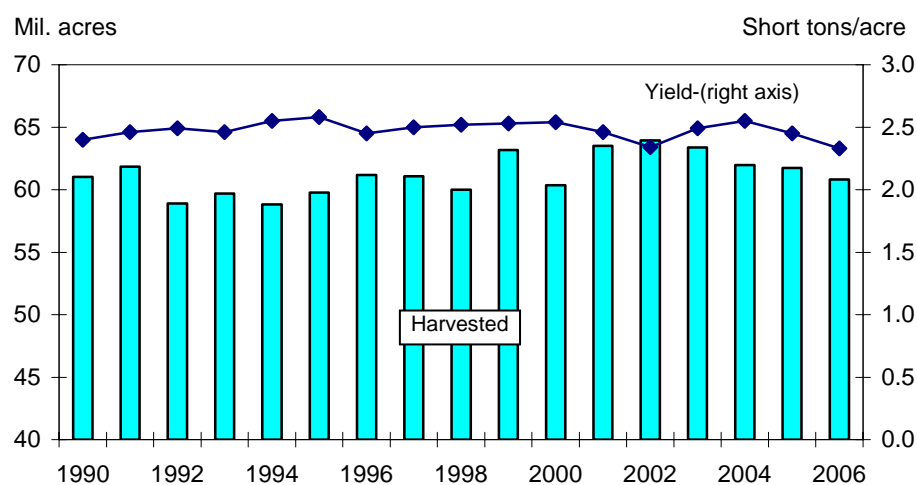
Hay other than alfalfa had a weighted season average price in 2005/06 of \$81.40 per ton, compared with \$74.60 per ton in 2004/05. In the first 11 months of the 2006/07 marketing year, the simple average price for hay was \$96.90 per ton, compared with \$81.55 in the first 11 months of 2005/06.

Prospective Harvested Acreage Down in 2006

The March *Prospective Plantings* report indicated that producers expect to harvest 63.1 million acres of all hay in 2007, up 2.2 million acres from 2006. Harvested acres are expected to increase from last year throughout the Great Plains and Southeast. Due to drought reduced production and low hay supplies in 2006, harvested area in 2007 is expected to increase by more than 100,000 acres throughout the Great Plains and in Alabama, Missouri, and Minnesota. The State

Figure 23

Hay harvested acres and yields

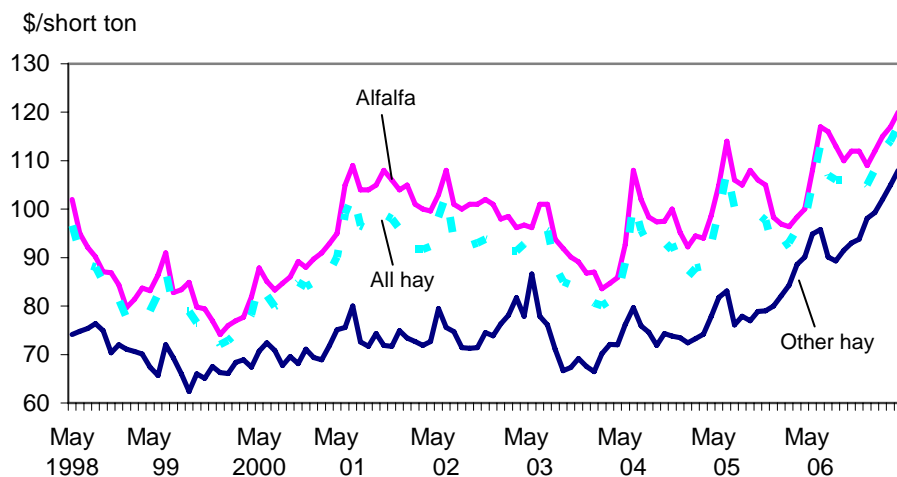


Sources: USDA, National Agricultural Statistics Service, *Crop Production Summary* and *Quick Stats*.

with the largest expected increase is South Dakota, up 700,000 acres from 2006. However, acres for harvest in 2007 in the Pacific Coast, Tennessee Valley, the Northeast, and much of the Corn Belt are expected to decline or remain unchanged from 2006. The State with the largest expected decrease in harvested area is Iowa, with a decline of 100,000 acres from 2006 to 2007. In the West, California expects harvested area to be down 50,000 acres from the previous year.

Figure 24

Hay prices received by farmers, May 1998-March 2007



Source: USDA, Economic Research Service, *Feed Grains Database*.

Feed and Residual Use

Feed and Residual Use To Increase

Feed and residual use is expected to be up slightly from last year in spite of lower broiler production. Producers of livestock and poultry (except broilers) are expected to increase production.

Feed and residual use of the four feed grains plus wheat in September-August 2006/07 is expected to be up 312,000 metric tons from the 165.6 million tons used in September-August 2005/06. Corn is expected to represent 90 percent of feed and residual use in 2006/07, down 4 percent from 2005/06.

The index of grain-consuming animal units (GCAU) for 2006/07 is estimated to be up 1 percent from the 91.5 million in 2005/06. In the index components, GCAUs for dairy, cattle on feed, hogs, broilers, turkeys, and layers are up year to year. However, the grain used per GCAU in 2006/07 is 1.82 tons, compared with 1.81 tons in 2005/06.

Dairy cows on January 1, 2007, totaled 9.1 million head, up 66,000 head from the same period in 2006. Dairy cow numbers are expected to decline slightly as the year progresses. Dairy replacement heifers totaled 4.3 million head on January 1, up 1 percent from the same period a year earlier. With growth in output per cow, milk production in 2007 is expected to be about 184 billion pounds, up from 182 billion in 2006. Thus, feed use by the dairy industry will stay strong.

Gains in feed needs for cattle on feed may be limited, as higher corn prices and improved forage availability leads to heavier cattle placed on feed. The number of cattle on feed on January 1, 2007, totaled 14.3 million head, up 1 percent from the same period a year earlier. Numbers of fed cattle slaughtered are expected to be up this year, but slaughter weights are expected to be lower than last year.

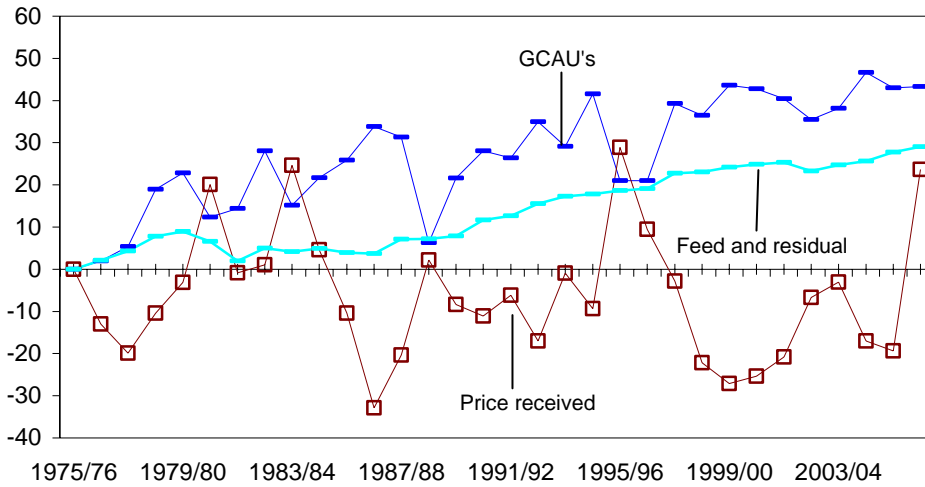
Broiler production in 2007 is expected to decrease 177 million pounds from 2006. Broiler prices were down 6.4 cents per pound in 2006, compared with prices in 2005, but they are expected to be up in 2007. Egg producers are expected to produce 7.6 billion dozen eggs in 2007, up 33 million dozen from 2006. Egg prices in 2007 are expected to be up 20.2-25.2 cents from the level of 71.8 cents per dozen in 2006. In 2007, turkey production is forecast at 5.8 billion pounds, up 2 percent from 2006. Overall, feed demand by the poultry sector is expected to remain strong.

Pork production in 2007 is expected to be up 2 percent from the 21-billion pounds produced in 2006. Hog farmers responding to the March 1, 2007 hogs and pigs inventory survey indicated that they intended to maintain the number of sows farrowing this year from the level a year earlier, in both March-May 2007 and June-August 2007. Pig crops were up relative to the level a year earlier in September-November 2006 and in December 2006-February 2007 and are expected to boost pork production in 2007. The forecast increase in pork production suggests feed needs for the pork sector will be strong in 2006/07.

Figure 25

GCAU's, Prices, and Feed and Residual use of corn, 1975/76-2000/01

% change from 1975/76

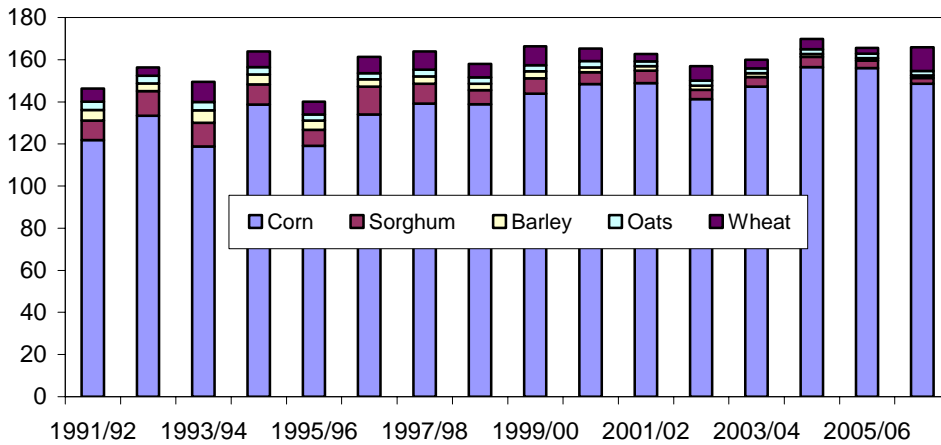


Source: USDA, Economic Research Service, *Feed Grains Database*.

Figure 26

Feed and residual use of grains 1991/92-2006/07 1/

Mil. Metric tons



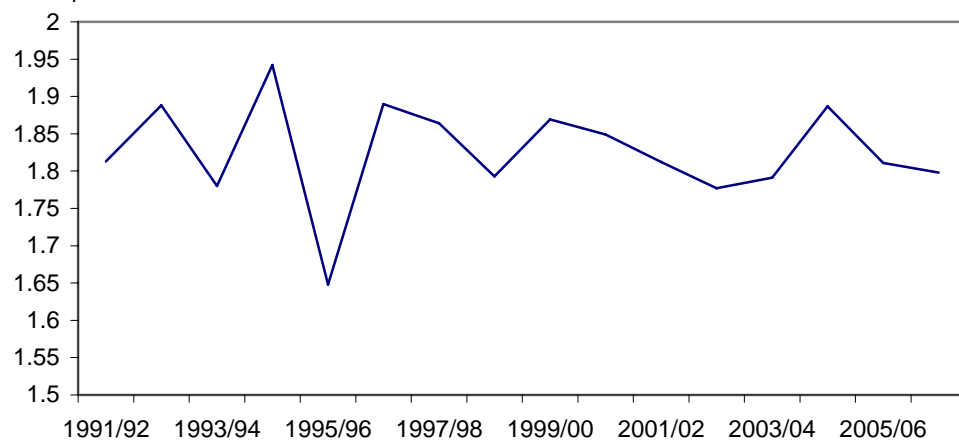
1/ All grains converted to September-August market year.

Source: USDA, World Agricultural Outlook Board, *WASDE*.

Figure 27

Feed and residual use of corn, sorghum, barley, oats and wheat per GCAU

Tons per GCAU



Source: USDA, Economic Research Service, *Feed Grains Database*.

Food, Seed, and Industrial Use of corn

Food, Seed, and Industrial Uses of Corn To Increase in 2006/07

Food, seed, and industrial use of corn in 2006/07 is expected to rise 19 percent from that of a year earlier. Corn used for ethanol accounts for nearly all of this increase.

Food, seed, and industrial (FSI) use of corn in 2006/07 is expected to total 3,535 million bushels, up from 2,981 million bushels in 2005/06. FSI use would represent 30 percent of total corn use, up from 26 percent in 2005/06 and 25 percent in 2004/05. Corn use in 2006/07 is expected to be up for all use categories, except for use in high fructose corn syrup (HCFS) use.

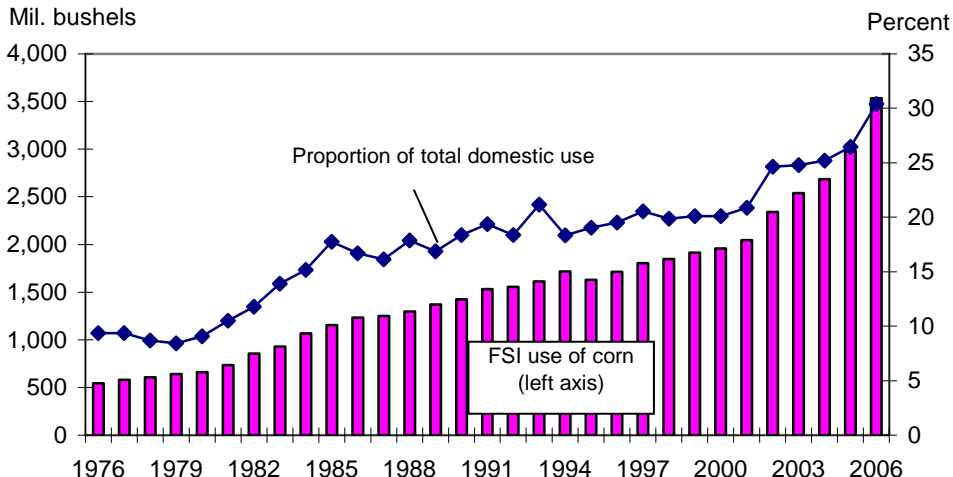
Corn used to make ethanol for all of 2006/07 is forecast at 2,150 million bushels, up 34 percent from 2005/06. Corn used to make ethanol for 2006/07 is forecast at 2,150 million bushels, up 34 percent from 2005/06. In January 2007 (latest data available), ethanol production reported by the Department of Energy (DOE) was 375,000 barrels per day, up from 288,000 barrels in January 2006 as new plants have come on stream. This ethanol production reflects higher use of capacity and the new plants plus expansion of existing plants that have been added in response to excellent returns in 2006. Stocks in January of ethanol also reported by DOE were 361 million gallons, up 39 percent from January 2006, but down 6 million gallons from December 2006.

The passage of the Energy Policy Act of 2005 resulted in gasoline producers shifting from MTBE to ethanol in May 2006 which increased demand for ethanol. To further complicate matters, questions about future availability of crude oil from politically sensitive areas have sharply boosted crude oil prices. In 2005/06, ethanol prices were high enough to result in imports of ethyl alcohol for fuel use, but the

Figure 28

FSI use of corn

Mil. bushels



Sources: USDA, Economic Research Service, *Feed Grains Database* and World Agricultural Outlook Board, WASDE.

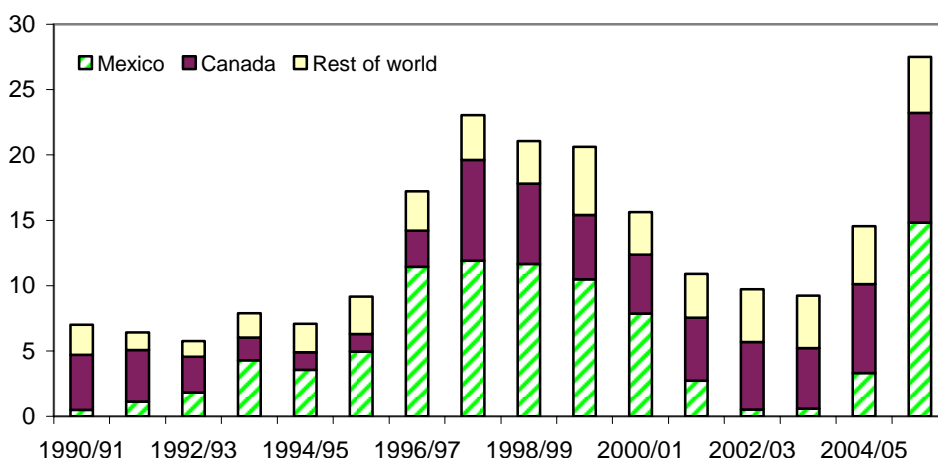
Census data do not have a separate category for fuel use. Ethyl alcohol imports totaled 2.1 billion liters during September 2005-August 2006 for the Census categories that would include ethanol, up from 583 million liters the previous year. Imports for fuel use must pay 54 cents per gallon unless the alcohol is produced in Caribbean Basin countries that can ship duty free to the United States. Almost all of the ethanol produced in the Caribbean Basin is further processed ethanol from Brazil.

Corn used for HFCS in 2006/07 is projected at 515 million bushels, down 3 percent from 2005/06. HFCS is primarily used in soft drinks. Demand for HFCS has slowed as consumers drink more bottled water and other beverage alternatives. Efforts to encourage consumers to exercise more and limit calories to reduce obesity reinforce this trend. New popular diets stress low carbohydrates and sugars. Potentially offsetting this decline in domestic U.S. HFCS use are prospects for higher HFCS exports to Mexico. As agreed to in consultations under the North American Free Trade Agreement, Mexico has allowed additional HFCS imports and eliminated the beverage tax on drinks containing HFCS. Estimated corn used for HFCS exports were up 33 percent in September 2006-February 2007 relative to the similar period a year earlier. In September 2006-February 2007, exports of HFCS in corn equivalents to Mexico and Canada were up 21 percent and 60 percent, respectively, from the same period a year earlier. In September 2005-August 2006, shipments of HFCS in corn equivalents to Mexico were up 349 percent from 2004/05.

Figure 29

U.S. HFCS 55

Mil. bushels

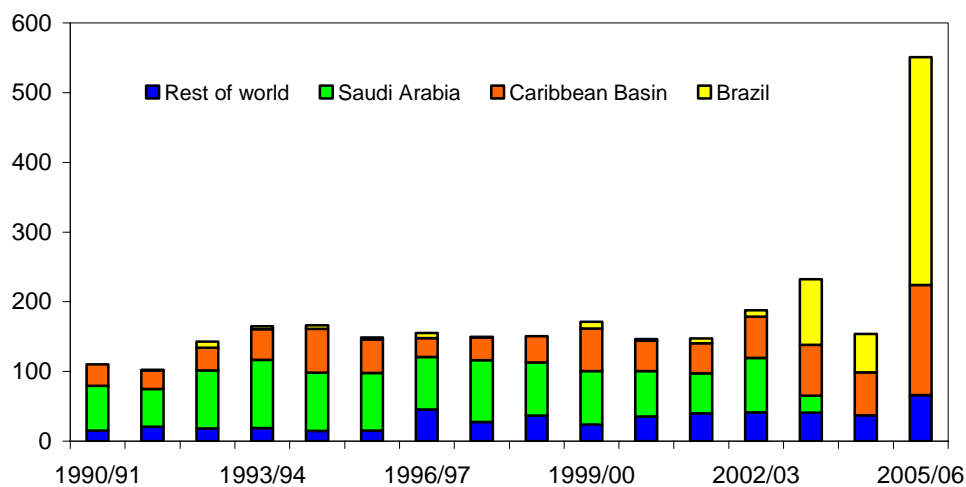


Source: USDC, Bureau of the Census, at <http://www.usatradeonline.gov/>

Figure 30

U.S. ethyl alcohol imports

Mil. gallons



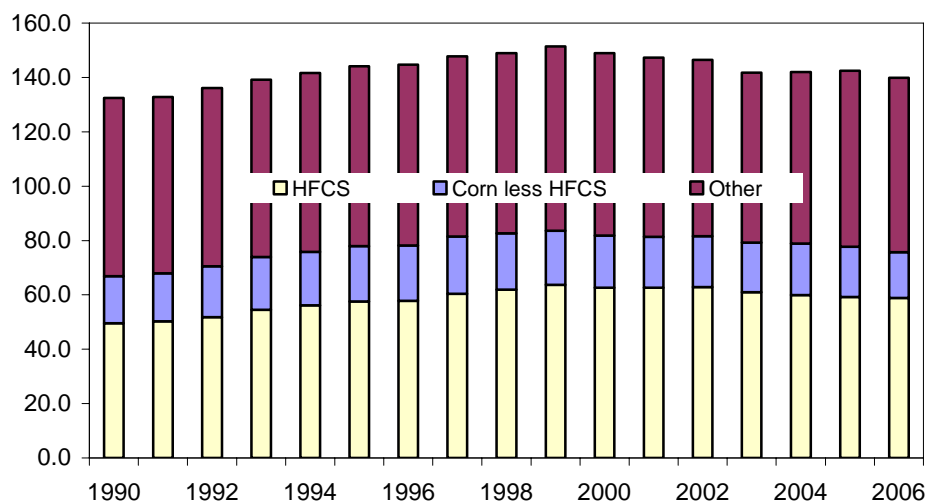
Source: USDC, Bureau of the Census, at <http://www.usatradeonline.gov/>

* Year-to-date September-February.

Figure 31

Per capita sweetener consumption

Pounds

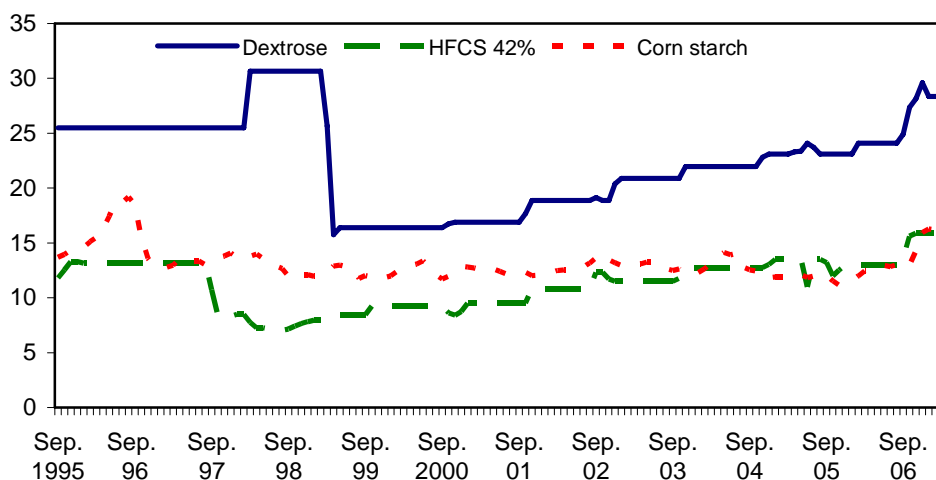


Source: USDA, Economic Research Service, *Sugar and Sweeteners Yearbook*.

Figure 32

Wet mill product prices, monthly, September 1995-March 2007

Cents/bushel

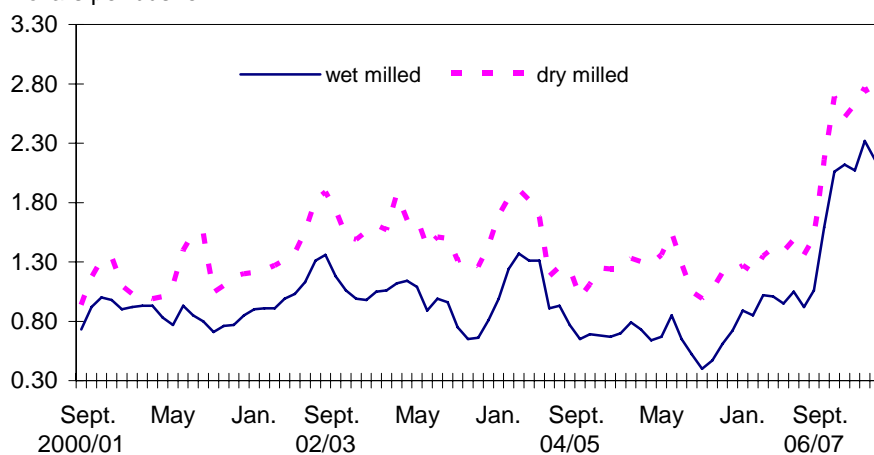


Sources: "Milling and Baking News," Sosland Companies, and USDA, Economic Research Service, *Feed Grains Database*.

Figure 33

Net corn costs for wet and dry milling, monthly

Dollars per bushel



Sources: USDA, Economic Research Service calculations from various series available from USDA, Agricultural Marketing Service.

Global Coarse Grain Production To Decline in 2006/07, Use Growing

World coarse grain production in 2006/07 is expected to decline less than 1 percent from that of 2005/06. Foreign coarse grain production is forecast up 2 percent over the same period as South America's production leaps 22 percent and Sub-Saharan Africa's production increases 7 percent despite devastating drought in South Africa. Reduced beginning stocks and slightly lower production leave 2006/07 global coarse grain supplies down year-to-year. World coarse grain consumption is expected to increase 3 percent in 2006/07, exceeding 1 billion tons for the first time. This is the fourth straight year of demand growth. Increasing global consumption of coarse grains is expected to reduce world ending stocks 26 percent to 123 million tons, the lowest in over 30 years.

Foreign Coarse Grain Production Higher in 2006/07

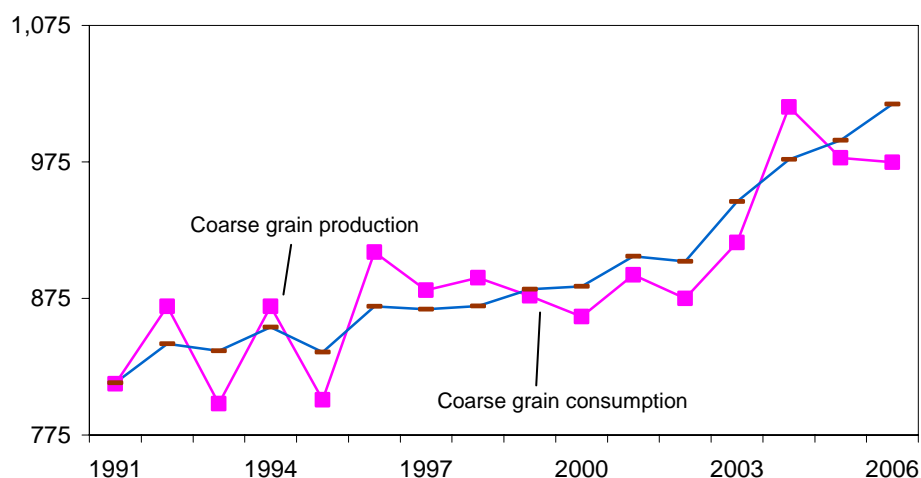
Foreign (world less the United States) 2006/07 coarse grain production is forecast at 695 million tons, up 2 percent from 2005/06. South America's production leaps 22 percent and Sub-Saharan Africa's production increases 7 percent despite devastating drought in South Africa. China is having another record coarse grains crop, up 3 percent. These increases more than offset another poor crop in the EU-25, down 4 percent, and a 51-percent drought-induced plummet in Australia.

Foreign corn production is expected to increase 4 percent this year, to a record 428 million tons. Foreign corn harvested area for 2006/07 is estimated up 3 percent as corn prices were attractive enough in early 2006 relative to other crops in most countries to maintain or increase area. Southern Hemisphere producers planted just

Figure 34

World feed grain production and consumption

Mil. metric tons

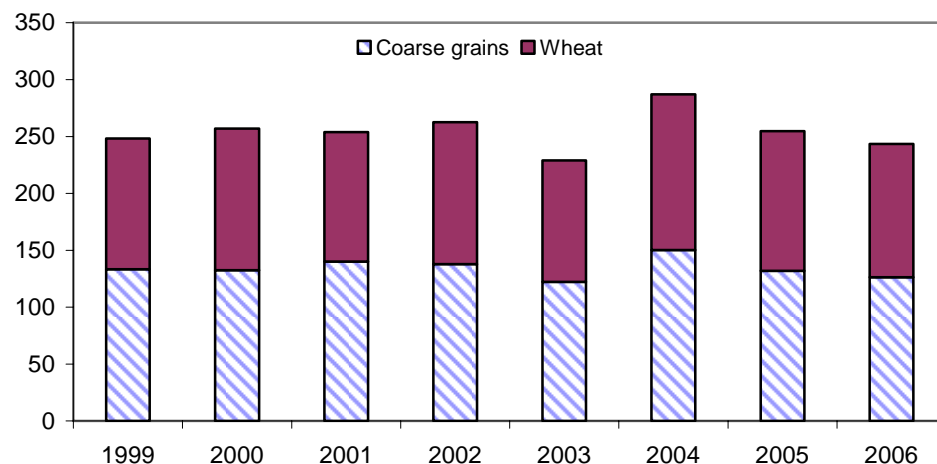


Sources: USDA, Foreign Agricultural Service, *Production, Supply & Distribution (PS&D)* and *Grain: World Markets and Trade (Grain Circular)*.

Figure 35

Wheat and coarse grain production in the EU-25

Mil. metric tons

Source: USDA, *Grain: World Markets and Trade (Grain Circular)*.

before corn prices spiked late in 2006, so corn area increases in these countries did not necessarily reflect these higher prices. Much of the increase in seeded area in Argentina was the result of better planting weather. In South Africa, prices encouraged a rebound in planted area, but drought devastated the crop, limiting area harvested. A very hot, dry summer reduced EU-25 corn production 10 percent from the previous year's drought-stricken level. However, increased corn area and record production is projected in 2006/07 for China and Brazil, offsetting declines elsewhere.

Foreign barley production is estimated up 1 percent to 135 million tons in 2006/07, with a 2-percent increase in area offsetting a slight decline in average yields. Projected foreign sorghum production is up 6 percent to 51 million tons, mostly due to good growing conditions in Sub-Saharan Africa (except for South Africa). Foreign oats production slipped 1 percent to 22 million tons, mostly due to reduced yields in the EU-25 and Canada. Foreign rye production plummeted 15 percent for the second straight year with lower area in the former Soviet Union (FSU).

China's coarse grain production (mostly corn) in 2006/07 increased 4 million tons over 2005/06 to a record 151 million. Corn area is estimated up 2 percent year-to-year as corn prices were attractive relative to prices of other grains and government incentive payments and tax policy favored grains. Growing conditions in China were mostly favorable this year, and yields matched the previous year's record levels. China's barley and sorghum production is small compared with that of corn, and each crop increased slightly, with barley production reaching 3.5 million tons and sorghum reaching 2.6 million.

The EU-25's coarse grain production is estimated down 6 million tons year-to-year to 126 million. The summer was exceptionally hot and dry across much of Western

Europe, cutting production for the second straight year. Drought reduced corn yields, especially in southern France and northern Italy. Some parts of the EU-25 had favorable growing conditions, and Hungary had good corn yields.

Coarse grain production in the former Soviet Union (FSU-12, excluding the Baltics) is estimated up 4 million tons to 59 million in 2006/07. In Russia and Ukraine, area planted to spring barley and corn increased on acres that had not been planted to winter wheat or rye the previous fall due to bad weather. Barley yields in Russia and Ukraine increased modestly, boosting production, but some hot dry weather in corn-producing regions trimmed yields year-to-year and corn production did not quite match the previous year. FSU-12 rye production dropped 17 percent from 2005/06 to 2006/07 due to reduced area planted, but oats production increased slightly.

South America's coarse grain production in 2006/07 is expected to jump 16 million tons over the previous year, reaching 89 million. Corn production in Brazil is projected up 8 million tons to a record 49.5 million, as growing conditions supported record yields for the main crop and strong corn prices provide an incentive to increase area for the dry-season second crop. In Argentina, corn area in 2006/07 rebounded due to modest returns for corn relative to soybeans and much improved planting moisture. Moreover, good growing conditions supported record forecast yields, and Argentina's corn production is forecast to increase 6.2 million tons to 22 million. Sorghum production in Argentina is also forecast to increase in 2006/07 with record yields projected.

Coarse grain production in the Middle East is down 1 million tons to 18 million in 2006/07. Turkey reduced agricultural support prices this year, and corn and barley area declined there.

Australia's 2006/07 coarse grain production is being devastated by drought. Coarse grain production there is forecast down 7 million tons from a year earlier to 7 million. Barley area harvested declined, and average yields were less than half the previous year. Barley production in Australia dropped 57 percent year-to-year to just 4.2 million tons. Sorghum area is projected to also decline in 2006/07, reducing production 26 percent to 1.5 million tons.

Mexico's coarse grain production in 2006/07 is expected to increase 3 million tons over production in 2005/06 to 29 million. Corn prices were considered attractive this year, and area increased 10 percent. Average corn yields in 2006/07 in Mexico are expected to exceed 3 tons per hectare for the first time. Sorghum production in Mexico is expected to be 5 percent higher than 2005/06 as increased area more than offsets a lower average yield.

Canada's coarse grain production of 23 million tons in 2006/07 is down 3 million tons from the crop in 2005/06. Barley area and yield declined, dropping production 20 percent year-to-year to 10 million tons. However, corn production in Canada surpassed 9 million tons for a second straight year as average yields declined only slightly this year, with area nearly unchanged. Oats area in Canada increased in 2006/07, boosting production slightly.

South African local corn prices at planting were much higher than those of a year earlier, and area planted increased from the previous year's low level despite areas where plantings were prevented because of lack of rain. An El Nino-induced drought plagued South Africa's corn production in 2007, and although harvested area is projected up 38 percent, average yield is forecast down enough to more than offset the increased plantings, leaving corn production down 13 percent at only 6 million tons.

Elsewhere in Sub-Saharan Africa, growing conditions have been generally good to excellent. Rains in East Africa have been better this year than a year ago. On balance, corn, sorghum and millet production in the region are up enough to more than offset most of the decline in South Africa's corn, leaving Sub-Saharan Africa's total coarse grain production up 5.7 million tons year-to-year to 88.7 million.

North Africa, especially its western portions, had good rains in 2006/07, and coarse grains production increased 2.4 million tons to 11.8 million. Barley production in the region more than doubled compared to 2005/06, reaching 4.6 million tons. In Egypt, where agriculture is irrigated, coarse grain production was steady at 7.0 million tons in 2006/07.

India expanded corn planting this year, and area and production reached record levels, but millet area dropped, leaving total coarse grain production down slightly at 34 million tons.

2006/07 Global Coarse Grains Beginning Stocks Down 7 Percent

Beginning stocks of global coarse grains in 2006/07 are estimated at 166 million tons, down 13 million from 2005/06, with most countries sharing in the modest reduction. Over half of estimated global coarse grain stocks are corn stocks in China and the United States. China has been reducing expensive-to-maintain government stocks for the last decade. U.S. corn stocks at the start of 2006/07 were 30 percent of total world coarse grain stocks.

Beginning stocks of coarse grain in 2006/07 for the rest of the world (world minus China and the United States) are estimated at 75 million tons, down 8 million from record levels in 2005/06, but still the second highest ever. EU-25 coarse grain beginning stocks were ample by historical standards, nearly as large as those of a year earlier at 23 million tons. Canada's coarse grain beginning stocks were also maintained over the same period at a relatively large 6 million tons.

Despite High Prices, Record Foreign Coarse Grain Use Expected in 2006/07

World coarse grain consumption in 2006/07 is forecast up 26 million tons over 2005/06 to a record 1,017 million tons, despite relatively high prevailing market prices. Foreign coarse grain consumption is projected up 20 million tons over the same period, with growth of nearly 3 percent. Foreign feed use is forecast up 11 million tons year-to-year to 483 million. Foreign wheat feed use is forecast down 3 million tons, with coarse grains replacing wheat in some animal rations in the EU-25 and FSU-12. World coarse grain consumption in 2006/07 has returned to a

growth path as livestock sectors in many countries have learned to adjust to outbreaks of animal diseases, especially avian influenza. Global income growth has supported strong demand for meat. Sharply higher corn prices prevalent in most parts of the world during 2006/07 have not yet caused foreign feed demand for corn to retrench.

EU-25 coarse grain use in 2006/07 is expected to increase 3 million tons over 2005/06 to 135 million. Most of the increase is for feed use, as ample coarse grain beginning stocks were used when production problems developed for wheat and corn. In Other Europe, coarse grain consumption is expected to decline to 24 million tons, down 1 million this year because of reduced production.

In China, economic growth remains robust, and meat production is growing. However, coarse grain use is expected to grow less than 3 percent (up 4 million tons from 2005/06 to 151 million in 2006/07). The very dramatic rise in soybean meal use may be moderating the increases in corn use, as feed rations become more balanced and efficient. Moreover, avian influenza problems have limited expansion of poultry production.

Much of East Asia (excluding China) is expected to have stagnant consumption of feed grains in 2006/07. In South Korea, feed grains use is expected to increase slowly because of reduced imports of feed-quality wheat. A small reduction in coarse grains use is expected in Japan in 2006/07 as domestic meat production declines as meat imports increase.

Southeast Asia is expected to increase coarse grain use 1 million tons from 2005/06 to 2006/07 reaching 27 million as production and consumption have adjusted to chronic problems with avian influenza and have begun to expand.

India's coarse grain consumption in 2006/07 is forecast down slightly from 2005/06 at 33 million tons. Food, seed, and industrial use of coarse grains is expected to drop almost 1 million tons to 25 million due to reduced production and the existence of programs that subsidize wheat and rice to low-income consumers. Feed and residual use, mostly of corn for poultry, is expected to increase 0.5 million tons to 8.6 million.

Consumption of coarse grain in the FSU-12 is expected to increase 2 million tons in 2006/07 as less feed-quality wheat is used in animal rations. Increased barley production is expected to lead to boost feeding. The poultry sector in the FSU-12 is expanding as it adjusts to the existence of avian influenza.

In the Middle East, coarse grain use in 2006/07 is expected to increase slightly over 2005/06 to 36 million tons. A large drop in barley imports during 2006/07 by Saudi Arabia has been partly offset by a reduction in stocks. Iran is expected to increase barley feeding year-to-year, but use of barley in Turkey is likely to decline due to reduced production. Israel is expected to reduce wheat feed use and increase coarse grains slightly.

Coarse grain consumption in Sub-Saharan Africa is forecast up 5 million tons over 2005/06 to 91 million in 2006/07. In this region, most of the coarse grain consumption is for human food use, and with production up in most countries

except South Africa, consumers there will eat more coarse grains. South Africa, devastated by drought, is expected to import corn and maintain human consumption in 2006/07 but reduce feed use some.

Coarse grain consumption in Latin America (excluding Mexico) is expected to increase 4 million tons over 2005/06 to 80 million in 2006/07. Growth is expected throughout the region with Brazil accounting for less than half the increase. Caribbean corn imports are projected up 15 percent this year.

In Mexico, coarse grain consumption in 2006/07 is forecast up 1 million tons year-to-year, reaching 39 million tons. This does not include U.S. shipments of cracked/kibbled corn, which reached 3.85 million tons of corn equivalent in 2005/06. During the second half of 2006/07, the Mexican Government indicated it will be more generous with permits to import corn (cupos), so corn imports are expected to expand, replacing sorghum and cracked corn.

In North Africa, feed grain consumption in 2006/07 is expected to increase 1 million tons over 2005/06 to 22 million tons due to increased barley production in Western countries and because of adjustments to avian influenza in Egypt.

In Canada, coarse grain consumption is expected to increase slightly at 24 million tons in 2006/07. The high price of imported corn provides an incentive for Canada to increase wheat feeding and draw down large beginning stocks of coarse grains.

Drought reduced production in Australia is expected cause a decline in coarse grain feed use in 2006/07, with an increase in wheat feeding to maintain animals. Coarse grain use there is expected to decline from 7.2 million tons year-to-year to 6.5 million.

Global Coarse Grain Ending Stocks in 2006/07 To Drop to 30-Year Nadir

World coarse grain ending stocks are projected to plummet 43 million tons in 2006/07 to 123 million. With U.S. stocks dropping, foreign coarse grain stocks are forecast down 13 million tons, to 98 million. China's coarse grain stocks (mostly corn) are forecast down 1 million tons during 2006/07 to 34 million. Coarse grain stocks in the rest of the world are expected to decline 12 million tons to 63 million.

China has been reducing corn stocks for the last 7 years. Eventually, China's corn supplies are expected to become tight enough so that China emerges as less of an exporter, and possibly a major corn importer, but the timing of this switch remains uncertain. As long as corn stocks are perceived as burdensomely large, the incentive for China to export corn to support producer prices will remain. During the latter half of 2005/06 and through 2006/07, relatively high prices for corn in China have been a disincentive for its government to subsidize exports, and exports have been reduced compared to other recent years. The reduced exports and firm corn prices in China are indicators that the long process of liquidating excess corn stocks may be mostly complete.

EU-25 coarse grain ending stocks, mostly barley and corn, are expected to decline 7 million tons to 16 million from 2005/06 to 2006/07. Program reforms in the EU-25

have eliminated price supports for rye, and rye intervention stocks have been liquidated. The price of grains above intervention levels throughout most of the EU-25 has facilitated a sharp drop in intervention stocks of coarse grains as well. Even with an increase in production, barley stocks are expected to drop 36 percent and corn stocks by 26 percent in 2006/07.

In the FSU-12, coarse grain ending stocks are expected to remain little changed year-to-year at the relatively low level of 5.5 million tons. A second straight year of very low corn production is expected to reduce corn stocks in South Africa to minimal levels. In 2006/07, Canada is expected to reduce coarse grain stocks 2 million tons to 4 million.

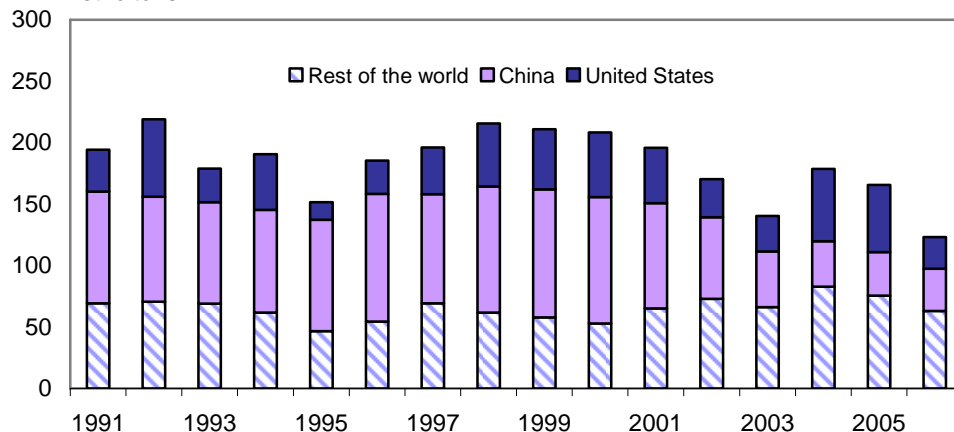
Foreign corn stocks are expected to decline 5 million tons to 70 million by the end of 2006/07 with significant declines in the EU-25 and China. However, corn ending stocks are projected to increase in Brazil, Mexico, and Argentina, with possible implications for U.S. corn exports in 2007/08.

World barley stocks are projected down 8 million tons year-to-year to 21 million, with the largest declines in the EU-25, Canada, and the Middle East. Global oats stocks are expected to decline slightly to 3 million tons, with decreases in both Canada and Australia. Global rye stocks are also expected to be cut in half to 1.3 million tons as the EU-25 liquidates government stocks and use exceeds production in the FSU-12. World sorghum stocks are expected to increase slightly to 4.7 million tons in 2006/07, as the drop in the United States is more than offset by an increase in Sudan.

Figure 36

Coarse grain ending stocks

Mil. metric tons



Source: USDA, World Agricultural Outlook Board, WASDE, and USDA, Foreign Agricultural Service, *Production, Supply Distribution (PS&D)*

World Coarse Grain Trade Outlook

Despite High Prices, Record World Corn Trade in 2006/07

Record world corn trade is projected for 2006/07 as import demand remains strong despite high prices. U.S. corn exports for the October-September 2006/07 trade year are forecast at 56 million tons, nearly the same as the previous year.

Competition from Argentina was down early in the trade year due to a small corn harvest in early 2006, but it is expected to increase in the later months after Argentina's harvest in March and April 2007. Corn exports from South Africa are expected to decline in 2006/07.

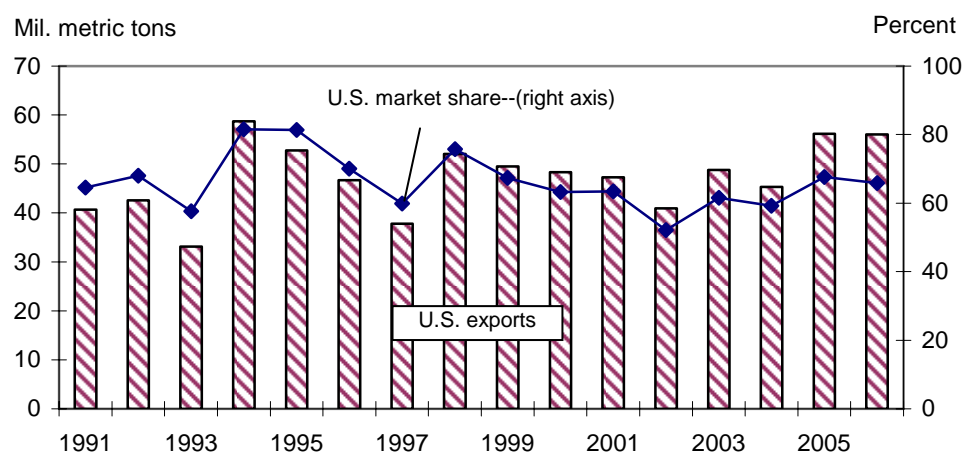
Global Coarse Grain Trade Forecast Down Slightly in 2006/07

World coarse grain trade in 2006/07 is projected at 108 million tons, down 1 million tons from 2005/06. Global corn trade is forecast up 2 million tons over the period to a record 85 million tons. Barley trade is projected down 2 million tons to 15 million as the EU-25 has, for the moment, stopped subsidizing exports. World sorghum trade is expected to decline almost 1 million tons year-to-year to 5 million due to reduced U.S. supplies. World oats trade is expected to be little changed at 2 million tons. Global rye trade is expected to continue its decline in 2006/07, falling to less than 0.5 million tons without EU-25 export refunds. This would be the lowest level in the USDA database going back to 1960.

The country with the largest reduction in coarse grain imports forecast in 2006/07 is Saudi Arabia, forecast down 1.0 million tons to 7.5 million, due to the reduced availability of barley. Sub-Saharan Africa, with increased production, is expected to reduce coarse grain imports 1.0 million tons year-to-year to 2.4 million despite an increase in imports by drought-stricken South Africa. EU-25 coarse grain imports are projected up 1.6 million tons to 5.3 million as high internal grain prices facilitate imports.

Figure 37

U.S. corn exports and market share



Sources: USDA, Foreign Agricultural Service, *Production, Supply and Distribution (PS&D)*, and USDA, Economic Research Service, *Feed Grains Database*.

Coarse grain imports by the Middle East are projected down 0.7 million tons to 17.1 million in 2006/07 due to lower barley imports by Saudi Arabia. Turkey is expected to increase corn imports due to reduced production. Israel's coarse grain imports are forecast up slightly in 2006/07 due to lower imports of wheat for feeding. Iran is expected to increase corn imports slightly as Brazil has ample supplies.

Japan is projected to import 19.5 million tons of coarse grain in 2006/07, down slightly from 2005/06. Japan remains by far the world's largest importer. South Korea's coarse grain imports (mostly corn) during 2006/07 are forecast up 0.3 million tons to 8.9 million tons because of reduced competition from feed-quality wheat.

Mexico is expected to increase coarse grain imports 0.3 million tons in 2006/07 to 10.2 million, reflecting strong Mexican demand in spite of higher U.S. prices. Mexico announced it would counter high tortilla prices by allowing more corn imports. Latin American (excluding Mexico) imports of coarse grain are forecast up slightly to 13.4 million tons, with strong growth in Caribbean corn imports more than offsetting reduced imports by Brazil.

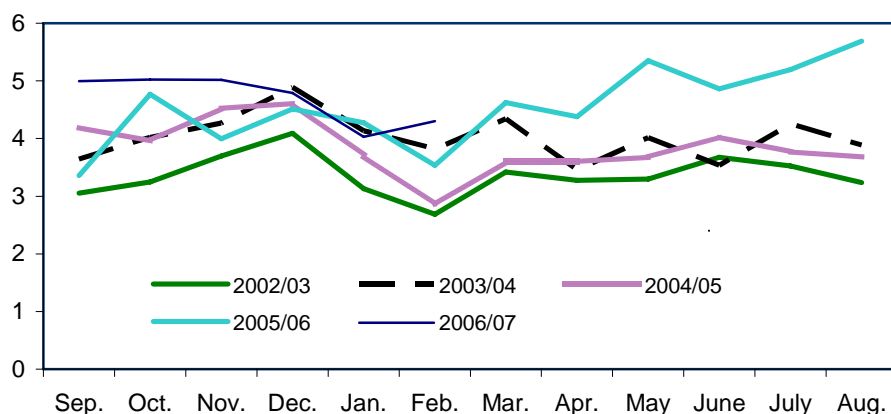
Competition for U.S. Corn Exports Starts Slow in 2006/07

Argentina will be the world's second largest corn exporter in 2006/07, despite a reduced 2006 harvest that slowed exports during the first months of the 2006/07 October-September trade year. Argentina's corn exports are expected to increase after the March-April 2007 harvest, increasing a projected 26 percent for the 2006/07 October-September trade year compared to 2005/06. Argentina's local marketing-year corn exports during 2006/07 are forecast up 45 percent to 14.5 million tons.

Figure 38

Monthly U.S. corn exports

Mil. metric tons



Sources: Bureau of the Census, USDC, at <http://www.usatradeonline.gov/> and USDA, Economic Research Service, *Feed Grains Database*.

Brazil is expected to become the world's third largest corn exporter in 2006/07, with record production forecast in 2007. Brazil's local marketing year corn exports are expected to reach record levels (6.5 million tons), but trade year 2006/07 corn exports are expected to be 1.0 million tons less, and will be smaller than 2003/04 shipments. With a record soybean crop, Brazil's corn shipments are expected to have limited access to port and transport facilities delaying corn exports into the 2007/08 trade year.

China's corn exports in 2006/07 are expected to decline slightly, as high internal corn prices limit the incentive to export. However, more export subsidy quotas could be made available later in the year depending on internal politics, new-crop developments, and prices.

Ukraine is expected to reduce corn exports to 1.0 million tons in 2006/07 due to reduced production. Thailand is expected to increase corn exports slightly in 2006/07 as export prices have been attractive. South Africa is expected to reduce corn exports (down 0.9 million tons to 0.5 million) due to a second consecutive small crop and increased internal prices. Romania has increased corn shipments to the EU-25 as it has joined the European Union.

World barley trade is forecast down 13 percent to 15 million tons for the 2006/07 October-September trade year. Ukraine is expected to be the world's largest barley exporter for the first time, despite a 0.6-million-ton reduction in exports to 4.3 million because of government limits on exports to keep internal prices in check. EU-25 barley exports in 2006/07 are forecast up 1.0 million tons to 3.5 million. EU-25 barley production increased in 2006/07, but high internal and world prices have made it unnecessary for the Commission to subsidize exports, which remain low by historical standards. Barley exports by Russia are forecast up 43 percent to 2.0 million tons in 2006/07 in response to high export prices. Australia's barley exports are expected to fall 62 percent year-to-year to only 2.0 million tons due to drought. In Canada, 2006/07 barley production dropped and internal feed prices are relatively high, limiting exports to mostly malting barley. Canada's barley exports are projected down 20 percent year-to-year to 1.5 million tons.

Global sorghum trade is expected to drop 15 percent from 2005/06 to 4.7 million tons in 2006/07. Mexico and Japan will remain the largest sorghum importers in 2006/07. Mexico is expected to reduce sorghum imports 0.9 million tons during 2006/07 to 2.1 million as U.S. supplies are limited. EU-25 imports are projected to more than double to 0.45 million in 2006/07 as the calculation of the variable import levy favored sorghum. The United States is expected to remain the dominant sorghum exporter in 2006/07, at 3.8 million tons, down 24 percent from 2006/07. Argentina (exporting 0.6 million tons) is expected to replace drought-stricken Australia as the second largest sorghum exporter.

Global oats trade is forecast down slightly to 2.1 million tons in 2006/07. U.S. imports and Canada's exports are relatively stable and dominate global oats trade. EU-25 exports continue to dwindle as excess supplies are small.

World rye trade is expected to decline again in 2006/07, falling to 0.455 million tons, the lowest level in the USDA database going back to 1960. EU-25 rye is not eligible for intervention stocks, so prices in the EU-25 have fallen

enough to discourage production. The Commission has liquidated intervention rye and ended subsidized exports. Without subsidies, import demand is weak. Japan is expected to remain the largest rye importer at 0.175 million tons, down 37 percent in 2006/07 over 2005/06.

U.S. Corn Exports Nearly Unchanged for Trade Year 2006/07

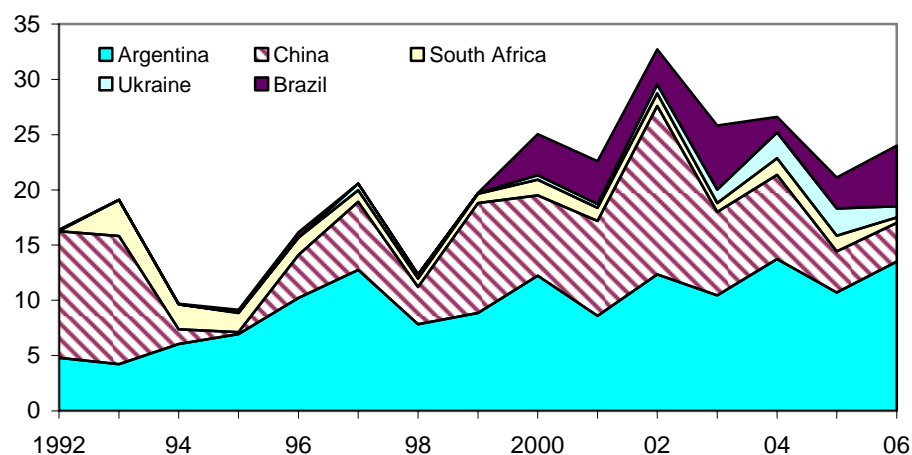
U.S. corn exports in October-September 2006/07 are forecast at 56.0 million tons, nearly the same as the 56.2 million reached in 2005/06. However, the 2006/07 export pattern is expected to be the “mirror image” of 2005/06. U.S. corn exports in 2006/07 started strong and are expected to moderate late in the year as competition from South America heats up, whereas in 2005/06, U.S. corn exports started moderately in the early months and then accelerated late in the year as competition from South America and China tailed off. The slow start to the 2005/06 year was partly a reflection of lingering logistical problems in the Lower Mississippi River resulting from Hurricane Katrina in late August. The U.S. share of world corn trade in 2006/07 is forecast at 66 percent, down slightly from 68 percent in 2005/06. Shipments during the first months of 2006/07 are ahead of the previous year’s pace, and outstanding sales are up significantly.

According to the Bureau of the Census, U.S. exports of corn during the first 5 months (October 2006-February 2007) totaled 23.2 million tons, up from 21.1 million tons during the same period a year ago. Grain Inspections data for March 2007 were 4.3 million tons, up from 3.5 million tons for March 2006. Corn shipments for the first-half of the 2006/07 trade year are up nearly 3 million tons. U.S. Export Sales, as of April 5, 2007, reports outstanding export sales of 10.2 million tons, up 1.6 million tons from a year ago. However, competition from both Argentina and Brazil is expected to be intense in the second half of 2006/07.

Figure 39

Corn exports for major competitors

Mil. metric tons



Source: USDA, Foreign Agricultural Service, *Production, Supply and Distribution (PS&D)*.

The most important increase in commitments (shipments plus outstanding sales) is to Mexico, up 3.5 million tons year-to-year to 8.7 million. Colombia, Israel, and Syria also show large increases in commitments. However, the largest market, Japan, is down 3 percent at 12 million tons, and Taiwan is also down.

U.S. sorghum exports in the 2006/07 October-September trade year are forecast at 3.8 million tons, down 1.2 million from 2005/06. Commitments to Mexico are down 49 percent at 1.3 million tons, but commitments to Japan are down only 14 percent to 0.8 million tons. U.S. barley exports for the same trade year are forecast up 40 percent year-to-year at 0.5 million tons even though U.S. barley prices are relatively high and barley exports are expected to be mainly routine shipments to Japan. Total U.S. coarse grain exports in 2006/07 are forecast down 1.2 million tons from 2005/06 to 60.3 million in 2006/07.

List of Figures

Figures	Page Numbers
1. U.S. feed grain production.....	1
2. U.S. feed grain supply and use	2
3. Ending stocks of feed grains	2
4. Corn production	3
5. Corn disappearance by type of use	4
6. Season-average corn prices received by farmers	5
7. U.S. corn: Central Illinois cash and average farm price, monthly, September 1995-March 2007	6
8. Corn harvested acres and yields	6
9. Percent of corn marketed by month	7
10. Sorghum harvested acres and yields	9
11. Sorghum disappearance by use	9
12. Sorghum prices received by farmers and percent of corn price	10
13. U.S. sorghum prices: Kansas City cash and average farm price, monthly, September 1999-March 2007	10
14. Barley harvested acres and yields	13
15. Barley total supply and disappearance	13
16. Barley disappearance by type of use	14
17. Monthly price received by farmers, June 1998-March 2007	15
18. Oats harvested acres and yields	17
19. Oats supply	17
20. Total use of oats over time	18
21. U.S. average prices of oats and corn plus oat price as a proportion of the corn price on a per pound basis, monthly, June 1999-March 2007	18
22. Hay production	19
23. Hay harvested acres and yields	21
24. Hay prices received by farmers, May 1998-March 2007	22
25. GCAUs prices, and feed and residual use of corn, 1975-/76-2000/01	24
26. Feed and residual use of grains 1991/92-2006/07	24
27. Feed and residual use of corn, sorghum, barley, oats and wheat per GCAU	25
28. FSI use of corn	26
29. U.S. HFCS 55	27
30. U.S. ethyl alcohol imports	28
31. Per capita sweetener consumption	28
32. Wet mill product prices, monthly, September 1995-March 2007	29
33. Net corn costs for wet and dry milling, monthly	29
34. World feed grain production and consumption	30
35. Wheat and coarse grain production in the EU-25	31
36. Coarse grain ending stocks	36
37. U.S. corn exports and market share	37
38. Monthly U.S. corn exports	38
39. Corn exports for major competitors	40

Appendix Tables

The appendix tables are now available online at <http://www.ers.usda.gov/data/feedgrains/FeedYearbook.aspx>. They will be updated monthly as new data are added to the Feed Grains Data Base, <http://www.ers.usda.gov/data/feedgrains/>.

Table 1—Corn, sorghum, barley, and oats: Planted acreage, harvested acreage, production, yield, and farm price,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable1.htm>

Table 2—Foreign coarse grains: Supply and disappearance,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable2.htm>

Table 3—Feed grains (corn, sorghum, barley, and oats): Marketing year supply and disappearance,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable3.htm>

Table 4—Corn: Marketing year supply and disappearance,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable4.htm>

Table 5—Sorghum: Marketing year supply and disappearance,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable5.htm>

Table 6—Barley: Marketing year supply and disappearance,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable6.htm>

Table 7—Oats: Marketing year supply and disappearance,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable7.htm>

Table 8—Hay: Production, harvested acreage, yield, and stocks,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable8.htm>

Table 9—Corn and sorghum: Average prices received by farmers, United States,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable9.htm>

Table 10—Barley and oats: Average prices received by farmers, United States,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable10.htm>

Table 11—Hay: Average prices received by farmers, United States,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable11.htm>

Table 12—Corn: Cash prices at principal markets,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable12.htm>

Table 13—Sorghum: Cash prices at principal markets,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable13.htm>

Table 14—Barley and oats: Cash prices at principal markets,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable14.htm>

Table 15—Feed-price ratios for livestock, poultry, and milk,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable15.htm>

Table 16—Byproduct feeds: Average wholesale price per ton, bulk, specified markets,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable16.htm>

Table 16—Byproduct feeds: Average wholesale price per ton, bulk, specified markets—Continued,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable16b.htm>

Table 17—Processed corn products: Quoted market prices,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable17.htm>

Table 18—U.S. corn and sorghum exports,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable18.htm>

Table 19—U.S. barley and oats exports,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable19.htm>

Table 20—U.S. corn and sorghum imports,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable20.htm>

Table 21—U.S. barley and oats imports,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable21.htm>

Table 22—U.S. corn and sorghum exports by selected destinations,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable22.htm>

Table 23—U.S. barley and oats exports by selected destinations,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable23.htm>

Table 24—U.S. corn and sorghum imports by selected sources,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable24.htm>

Table 25—U.S. barley and oats imports by selected sources,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable25.htm>

Table 26—U.S. white corn exports by selected destinations,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable26.htm>

Table 27—World coarse grain trade: Selected exporters and imports by commodity,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable27.htm>

Table 28—Rail rates and grain shipments,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable28.htm>

Table 29—Processed feeds: Quantities fed and feed per grain-consuming animal unit, <http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable29.htm>

Table 30—Indexes of feed-consuming animal units,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable30.htm>

Table 31—Corn: Food, seed, and industrial use,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable31.htm>

Table 32—U.S. exports of ethyl alcohol by selected destinations,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable32.htm>

Table 33—U.S. imports of ethyl alcohol by selected sources,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable33.htm>

Table 34—U.S. exports of brewers' and distillers' dregs and waste by selected destinations,
<http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable34.htm>

Table 35—U.S. imports of brewers' and distillers' dregs and waste by selected sources, <http://www.ers.usda.gov/Data/FeedGrains/StandardReports/YBtable35.htm>