

USDA Crop Production & WASDE Reports:

Corn & Grain Sorghum Market Impacts

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Summary

With lower projected 2011 U.S. corn production and marginally tighter U.S. corn and feedgrain supply-demand balances, the November 9th USDA Crop Production and World Supply and Demand Estimates (WASDE) reports provided fundamental support for U.S. feedgrain prices for the remainder of 2011 and on into 2012.

2011 Corn Production: In its November 9th Crop Production report, the USDA National Agricultural Statistical Service projected U.S. 2011 corn yields to be 146.7 bushels per acre yield, the lowest yield since 147.9 bu in 2005 and 142.2 bu in 2003. Corn production in the U.S. in 2011 was projected to be 12.310 billion bushels, down 123 million bushels (mb) from the previous month, and 1.16 billion bushels (bb) less than USDA July 2011 projections. This is the lowest U.S. corn production total since 12.1 bb in 2008.

MY 2011/12 Corn Supply-Demand Balances: In the November USDA WASDE report, significant price rationing was projected to occur in the 2011/12 marketing year, with marked reductions in projected exports (down 12.8%) and livestock feed use (down 4.0%). Corn ethanol usage is projected to decline only marginally (down 0.4%). Corn input buyers are likely to find it less profitable to buy and produce products with record high corn prices in the \$6.20-\$7.20 range as projected by the USDA, which is in essence the market mechanism for price rationing of corn usage.

The outcome of the severe price rationing projected for MY 2011/12 is that ending stocks are projected to decline to 843 million bushels, with % ending stocks-to-use falling to 6.7%. Even though November ending stocks and stocks-to-use are up markedly from USDA September projections (i.e., 672 mb and 5.3% S/U, respectively), they still represent the lowest stocks estimates since the record lows in MY 1995/96 (426 mb and 5.0% stocks-to-use).

MY 2011/12 Grain Sorghum Supply-Demand Balances: Grain sorghum production in the U.S. in 2011 has been damaged severely by drought in the southern and central Plains (i.e., Kansas and Texas). Grain sorghum stocks are at minimal levels logistically speaking, and grain sorghum prices are following closely to those of corn.

Market Prospects for 2011/12: Prospects are for tight supply-demand conditions and historically high feedgrain prices from fall 2011 through spring-summer 2012. Strong pressure will occur to at least maintain if not significantly increase 2012 U.S. corn acreage in an attempt to replenish U.S. corn supply-demand balances in the 2012/13 marketing year. Because of this, 2012 grain markets are likely be extremely sensitive to any weather threats to 2012 U.S. corn crop. If per chance dry conditions were to continue in the U.S. in 2012 in key corn and grain sorghum production areas, high and volatile feedgrain prices would also occur, with the likelihood of major negative consequences occurring in domestic feedgrain using industries. Broader economic and financial market trends are impacting all commodity markets at this time, and serve as a threat to the corn market should it appear that a second major U.S. recession is occurring.

I. U.S. Corn Market Situation and Outlook

- A. **Lower 2011 U.S. Corn Production Prospects:** In its November 9th Crop Production report, the USDA National Agricultural Statistical Service (NASS) lowered its projection of 2011 U.S. corn production for the fourth consecutive month (since July 2011). This is the second year in a row (i.e., 2010 and now 2011) in which weather-related crop production problems have resulted in lower U.S. corn production than has been projected or hoped for early in the growing season (**see Table 1**). Shorter than hoped for production these last two years have led to a marked tightening of U.S. corn supply-demand balances and provided support for record high U.S. corn prices in the 2011/12 marketing year.
- a. **U.S. 2011 Corn Planted Acreage = 91.9 million acres:** USDA NASS projected that farmers in the United States planted 91.897 million acres (ma) of corn in 2011, up 4.2% from 88.192 ma in 2010. This is the largest amount of U.S. corn planted acreage since the 2007 record high of 93.527 ma.
 - b. **U.S. 2011 Corn Harvested Acreage = 83.9 ma:** USDA NASS projected that the U.S. would harvest 83.936 ma of corn in 2011, up 3.1% from 81.446 ma in 2010, and the largest amount of U.S. corn harvested acreage since the 2007 record high of 86.5 ma.
 - i. **Kansas & Nebraska Corn Acreage:**
 - **Kansas** 2011 harvested corn acreage is projected to be 4.30 ma, down from 4.65 ma in 2010.
 - **Nebraska** 2011 harvested corn acreage is projected to be 9.50 ma, up markedly from 8.85 ma in 2010.
 - c. **U.S. 2011 Corn Yields = 146.7 bu/acre:** USDA NASS projected 2011 U.S. corn yields at 146.7 bu/acre, down from 148.1 bu/ac in September and October, and down from 153.0 bu in August and earlier USDA WASDE projections of 158.7 bu in July. If realized, this would be the lowest average U.S. Corn yield since 147.9 bu/ac in 2005 and 142.2 bu/ac in 2003. Corn yield prospects for the U.S. in 2011 have been affected by the cumulative impact of a) difficult spring planting conditions in the eastern and northern Corn Belt, b) hot, dry July and August weather in many Corn Belt areas, and c) continuing drought in both the southern and central Plains and in the southeastern United States.
 - i. **U.S. Corn Yields on a “Bell Curve”:** Over the last 5 years, U.S. corn yields have taken on a “bell curve” pattern, with lower average yields in 2007 and 2011, and higher yields in the interim – with 2009 being the highest. United States corn yields were 150.7 bu/ac in 2007, 153.9 bu/ac in 2008, 164.7 bu/ac in 2009, 152.8 bu/ac in 2010, and are projected to be 146.7 bu/ac in 2011.
 - If the 2011 U.S. corn yield projection of 146.7 bu/ac holds true, the record high yield of 164.7 bu/ac will have been 7% higher than the next highest yield of 153.9 bu/ac (2008) during this period, and 8.8% higher than the average yield of 151.4 bu/ac for other year’s yields since 2007.

Commentary: Expectations of U.S. trendline yields of 165 bu/ac or more since 2009 have not been met in either 2010 or 2011, and will effectively lead to lower trendline corn yield projections for 2012 and succeeding years.

- d. **U.S. 2011 Corn Production = 12.310 billion bushels:** USDA NASS projected 2011 U.S. corn production to be 12.310 billion bushels (bb) in its November 9th report, down from 12.447 bb U.S. corn production in 2010. This 2011 projection is down 123 million bushels (mb) from the projection of 12.433 bb in the October report, and is down 1.16 bb from the July 2011 USDA estimate of 13.470 bb.
- i. Over the last 5 years, U.S. corn production has been 13.038 bb in 2007, 12.092 bb in 2008, 13.092 bb in 2009, 12.447 bb in 2010, and is now projected to be 12.310 bb in 2011.
 - If the 2011 U.S. corn production projection of 12.310 bb holds true, this will be the fourth largest U.S. corn crop in history, trailing only 2007, 2009 and 2010.
 - ii. Historic Accuracy of NASS October Crop Production Forecasts: Over the last 20 years, the 90% confidence interval for USDA NASS October U.S. corn production forecasts is surprisingly wide, ranging +/- 2.1% from final U.S. corn production estimates. This means that there is a 90% probability that final 2011 U.S. corn production will be in the range of 12.051 to 12.569 bb – a range of outcomes over which because of current tight U.S. corn supply-demand balances markedly different ending stocks-to-use and price regimes could result. If adjustments / reductions to 2011 corn planted and/or harvested acreage do occur, it will likely be reflected in the January USDA NASS Crop Production report.

Commentary: The inability since 2009 to meet U.S. trendline yields of 165 bu/ac or more have caused a dramatic tightening of U.S. corn ending stocks and % ending stocks-to-use in MY 2010/11 and again in MY 2011/12. Either a) a return to trendline U.S. corn yields, b) large increases in U.S. corn acreage, or c) sizable reductions in U.S. corn usage will be needed to rebuild U.S. corn stocks in MY 2012/13 and later years.

- B. **“Old Crop” U.S. Corn Supply-Demand for MY 2010/11:** In its November 9th World Agricultural Supply and Demand Estimates (WASDE), the USDA World Agricultural Outlook Board made a number of small adjustments to its old crop MY 2010/11 U.S. corn usage estimates (**Table 1 & Figure 1**).

In the November USDA WASDE report, estimated old crop MY 2010/11 feed and residual use dropped to 4.792 bb, down 11 mb from October. Non-ethanol food, seed and industrial usage was estimated to be 1.407 bb for MY 2010/11, up 12 mb from October, but down from 1.410 bb in September. Ethanol usage of corn increased slightly (up 1 mb to 5.021 bb). Total use of U.S. corn for MY 2010/11 was estimated to be 13.054 bb (up 1 mb), while estimated old crop MY 2010/11 ending stocks of 1,128 bb are up from 920 mb in September, and from 880 mb in July.

- a. **% Ending Stocks-to-Use (8.6%) & Prices (\$5.18 /bu) for MY 2010/11:** Projected % ending stocks-to-use of 8.6% for “old crop” MY 2010/11 is the third lowest since MY 1973/74, behind only 5.0% in MY 1995/96 and the projection of 6.7% for “new crop” MY 2011/12. U.S. average corn price estimates for MY 2010/11 were unchanged at \$5.18 per bushel.

- C. **“New Crop” U.S. Corn Supply-Demand for MY 2011/12:** In response to lower 2011 U.S. corn production prospects the USDA World Agricultural Outlook Board made significant adjustments to supplies, feed and residual usage, and ending stocks projections in its November 12th WASDE

report (**Table 1 & Figure 1**). These changes reflect the expected rationing influence of high U.S. corn prices on U.S. corn usage in MY 2011/12.

- a. **Lowest U.S. Corn Total Supplies since MY 2007/08 = 13.453 bb:** With projected MY 2011/12 beginning stocks of 1.128 bb (up 208 mb from September, but still the lowest since 958 mb in MY 2004/05), 2011 production of 12.310 bb, and imports of 15 mb, total supplies of U.S. corn for MY 2011/12 are projected to be 13.453.
- i. Projected total U.S. corn supplies of 13.453 bb for MY 2011/12 are the lowest since 12.510 bb in MY 2006/07, and are 5.7% below the four year average of 14.262 bb U.S. total supplies for MY 2007/08 through MY 2010/11 (**Table 1 & Figure 2**).

Commentary: The combination of moderately tight beginning stocks (following a shorter than expected corn crop in 2010) and lower than anticipated production has led to the current tight, “at risk” supply-demand balance situation for U.S. corn in MY 2011/12. Prospects for extremely tight beginning stocks are likely to cause anxious responses and further price volatility in feedgrain markets in response to any weather threat to 2012 U.S. corn planting and production during spring – summer 2012.

- b. **Total Corn Use Down to 12.610 bb in MY 2011/12:** Following from expectations of even greater reductions in new crop total U.S. corn supplies from previous months, the USDA projected that price rationing would bring about yet more cuts in U.S. corn usage in order to maintain minimal required ending stocks levels in the summer (July-August-September 2012 (**Table 1 & Figure 1**)).
- i. Ethanol Use = 5.000 bb: The USDA left unchanged its projection of U.S. corn usage for ethanol in MY 2011/12 at 5.00 bb. This projection is down from 5.150 bb in July, and from 5.021 bb for MY 2010/11. If this projection holds true, it would be the first year-to-year reduction in U.S. corn ethanol usage since the record tight ending stocks-to-use year of MY 1995/96.
- These downward adjustments by USDA since July are symptomatic of concerns about whether ethanol demand and associated U.S. corn usage will maintain at these levels. A combination of a) weakness in the general economy, and b) uncertainty about the impact of likely changes in government funding for ethanol blenders credits and tariff protection in 2012 may factor into this downward adjustment.
- ii. Non-ethanol FSI Use = 1.410 bb: No changes were made in projected non-ethanol food, seed and industrial use of corn of 1.410 bb. This amount of non-ethanol FSI use is just under the record large amounts of 1.416-1.422 bb during the MY 2005/06-MY 2006/07 period.
- iii. Export Use = 1.60 bb: The USDA left unchanged its projection of U.S. corn exports in MY 2011/12 of 1.600 bb, down from projections of 1.650 bb in September and 1.900 bb in July. If this projection holds true, it would be the 5th lowest amount of U.S. corn exports since MY 1990/91 – following 1.584 bb in MY 1991/92, 1.328 bb in MY 1993/93, 1.504 bb in MY 1997/98, and 1.588 bb in MY 2002/03.

Commentary: Projections of foreign coarse grain production have increased markedly since early summer 2011 - from 925.1 mmt in June up to 946.1 mmt in November. The category of “coarse grains” include corn, grain sorghum, barley, oats, rye and mixed grains. Because of increasing foreign production, projected World exports of coarse grains for MY 2011/12 have increased from 114.3 mmt in June 2011 up to 118.87 in November, at the same time that U.S. coarse grain export prospects have declined - down from a projection of 51.83 mmt in July to 43.20 mmt in November. Increased foreign coarse grain production and total supplies have more than offset the decrease in combined U.S. corn, grain sorghum, barley and oat production, and more than offsets projected declines in U.S. feedgrain trade (**Figure 3**).

- iv. **Feed & Residual Use = 4.600 bb:** The USDA projects MY 2011/12 U.S. corn feed and residual use to be 4.600 bb, down 100 mb from October, but down from 5.050 bb from July and down from 4.792 bb in MY 2010/11. If this projection holds true, it would be lowest amount of U.S. corn feed and residual use since 4.692 bb in MY 1995/96.

Commentary: This reduction in U.S. livestock direct feed usage of corn continues the year-to-year downward trend from the record high of 6.135 bb in MY 2004/05. The increased availability of distillers grains from ethanol production for domestic livestock feeding has offset to some degree this reduction in direct U.S. corn livestock feed use.

- v. **Total Corn Use = 12.610 bb:** For MY 2011/12, the USDA projects that total use of corn will be 12.610 bb, down 100 mb from October, and down from 13.500 bb (down 6.6%) from July. If this projection is accurate, MY 2011/12 use of 12.610 bb would be 3.4% less than 13.054 bb in MY 2010/11, and would be the lowest since 12.056 bb in MY 2008/09 and 12.737 bb in MY 2007/08.

Commentary: In these preliminary USDA projections of how short supplies and high prices will affect the usage of U.S. corn in MY 2011/12, the USDA is accounting for a number of factors. These include a) the inflexibility of demand and price responsiveness of U.S. gasoline demand, b) projected livestock feeding inventories, livestock/meat prices and projections of livestock feeding profitability across various livestock species, c) continued strength of consumer demand for processed corn products, and d) the value of the U.S. dollar relative to the currencies of countries involved in World coarse grain export / import trade.

Compared to MY 2010/11, the USDA is projecting that U.S. corn exports while be rationed proportionally more than other categories of usage. Compared to MY 2010/11, total corn use in MY 2011/12 is projected to decline 3.4%, while U.S. corn exports are projected to decline 13%, compared to total corn FSI use (down 0.4%) and livestock feed use (down 4.0%).

Although these early projections are subject to change, they are consistent with the broader idea that higher corn prices will continue to ration usage to such a degree so as to ensure that adequate supplies of corn will exist in the summer of 2012 (the end of MY 2011/12). If such rationing of U.S. corn usage does **not** occur, it is possible that drastic feedgrain supply shortages could occur to the degree that domestic agricultural industries that rely on corn inputs would be temporarily disrupted or shut down for lack of available corn supplies at affordable prices.

c. **Recent Corn Use Trends:** Recent USDA projections of tighter livestock feeding of corn in MY 2011/12 are a continuation of a seven year trend (since MY 2004/05) in direct corn feed usage in the U.S. livestock industry (**Figure 1**). Exports of U.S. Corn are projected to decline for the third consecutive year (since MY 2009/10). Year-to-year increases in corn ethanol usage are projected to continue - but to moderate in response to high corn input prices, likely ethanol policy changes, and prospects for moderation in the growth of U.S. gasoline demand.

C. **“New Crop” Ending Stocks (843 mb) & Ending Stocks-to-Use (6.7%):** The USDA projects MY 2011/12 ending stocks to be 843 mb, down from 866 mb in the October WASDE, up from 672 mb in September, and less than projections of 870 mb in July. This level of U.S. corn ending stocks would be down from 1.128 bb in MY 2010/11 and from 1.708 bb in MY 2009/10. The MY 2011/12 projection equals 6.7% ending stocks-to-use, down slightly from 6.8% in October, and up from 5.3% in August. However, this projection of 6.7% ending stocks-to-use in MY 2011/12 is the second lowest on record since the early 1970s, and is down from 8.6% in MY 2010/11, and from 13.1% in MY 2009/10 (**Figure 2**). These % ending stocks-to-use levels compare to the historic low of 5.0% in MY 1995/96.

Commentary: It is still possible that % ending stocks to use levels of 5.0% or less may occur in MY 2011/12 for a number of plausible reasons. If some combination of a) lower projected 2011 U.S. corn production in the January 2012 Crop Production report, or b) greater actual usage of U.S. corn in any of the major categories than is currently projected, then there is a possibility of new record low U.S. corn % ending stocks-to-use occurring (i.e., below 5.0%) in MY 2011/12.

Whereas uncertainty about estimates of U.S. corn production typically are mostly resolved by the November or following January crop production reports, questions about whether the rate of usage will lead to reductions in ending stocks are “worked through” in the cash market in the later part of the marketing year. If corn usage is on a more rapid pace than can be sustained to maintain a level of 6.7% endings stocks-to-use for MY 2011/12, then it will likely be reflected in cash corn basis bids, the pace of U.S. corn exports, and weekly U.S. ethanol production and inventory figures. Upcoming USDA quarterly stocks reports for December 1st, 2011, and for March 1st, June 1st and September 1st of 2012 are likely to play an increasingly important role in determination of U.S. feedgrain supply-demand balances.

D. **“New Crop” MY 2011/12 U.S. Corn Prices = \$6.20-\$7.20 /bu.:** U.S. corn prices have responded sharply to the high side in response to tightening of U.S. corn ending stocks-to-use. The trend which began in MY 2010/11 has continued in MY 2011/12, and is very likely to persist into MY 2012/13 (**Table 1 & Figure 2**).

a. The USDA projected MY 2011/12 U.S. average corn prices to be record high in the range of **\$6.20-\$7.20 per bushel**, unchanged from October but down \$0.30 on each end of the range from September. Current projections of MY 2011/12 prices of \$6.20-\$7.20 per bushel are up from \$3.55 in MY 2009/10 and \$5.18 in MY 2010/11.

Commentary: Tight corn supplies and high corn prices have provided carryover support for wheat market prices. However, first in the October WASDE report and now continued in the November WASDE, projections of wheat feeding declined markedly from September. That said, by responding to high corn prices, the wheat market appears to be acknowledging the

possibility that large amounts of U.S. wheat feeding could have the opportunity to occur in the later part or summer months of MY 2011/12 to make up for the lower than expected 2011 U.S. corn crop and historically tight MY 2011/12 corn ending stocks. Because of market arbitrage, as corn prices have moved higher, wheat prices have followed them at levels approximating breakeven feeding opportunities between the two livestock feed sources.

E. **World Corn and Coarse Grain Supply-Demand Trends:** World and U.S. demand growth in the form of bioenergy use and livestock feeding is a key factor explaining record high U.S. corn prices – along with a likely second consecutive year of lower than expected U.S. corn production (**Figure 3**). Persistent growth has occurred in U.S. and World usage for corn and other coarse grains since MY 2007/08. This resilient growth trend has occurred even though historically high corn / coarse grain prices occurred in 2008 and again in 2010-11.

- a. Projected World coarse grain production (1,136 mmt) and total supplies (1,304 mmt) for MY 2011/12 were down 0.46 and 0.52 mmt from October, respectively. World coarse grain use increased 0.34 mmt to leave projected World coarse grain ending stocks at 155 mmt (down 0.86 mmt from October). World coarse grain % ending stocks-to-use is estimated at 13.5%, down from 13.6% in October, but up from 13.1% in September and from 12.8% in August. Increases in foreign coarse grain production and total supplies combined with increased foreign use and ending stocks offset to a large degree the tightening of projected U.S. feedgrain supply-demand balances for MY 2011/12.

Commentary: Even with the projected increase in World coarse grain ending stocks, World coarse grain ending stocks-to-use has declined from 17.5% in MY 2009/10, to 14.9% in MY 2010/11, and now down to 13.5% for MY 2011/12. A broader trend toward tighter World coarse grain ending stocks is continuing, with a recovery needed in 2012 U.S. crop production to begin to rebuild both U.S. and World coarse grain supply-demand balances.

D. **Persistence of Tight Supply-Demand for Corn into MY 2012/13:** Given a) the likelihood of historically tight ending stocks for U.S. corn in MY 2011/12, b) competition for U.S. crop acres from soybeans and other crops in spring 2012, and c) the likelihood crop production risk concerns to occur sometime during the 2012 growing season, ***market concerns about the adequacy of U.S. corn supplies and supply-demand balances are likely to persist into MY 2012/13***, and to cause corn market price volatility through the 2012 U.S. corn growing season.

Table 1. U.S. Corn Supply-Demand Balance Sheet: MY 2007/08 through MY 2011/12

(November 9, 2011 USDA WASDE Report)

Item	2007/08	2008/09	2009/10	2010/11	2011/12
Planted Area (million acres)	93.5	86.0	86.4	88.2	91.9
Harvested Area (million acres)	86.5	78.6	79.5	81.4	83.9
Yield per harvested acre (bushels/acre)	150.7	153.9	164.7	152.8	146.7
	million bushels				
Beginning Stocks	1,304	1,624	1,673	1,708	1,128
Production	13,038	12,092	13,092	12,447	12,310
Imports	20	14	8	27	15
Total Supply	14,362	13,729	14,774	14,182	13,453
Ethanol for fuel	3,049	3,709	4,591	5,021	5,000
Non-ethanol Food, Seed & Industrial	1,393	1,316	1,370	1,407	1,410
Exports	2,437	1,849	1,980	1,835	1,600
Feed & Residual	5,858	5,182	5,125	4,792	4,600
Total Use	12,737	12,056	13,066	13,054	12,610
Ending Stocks	1,624	1,673	1,708	1,128	843
% Ending Stocks-to-Total Use	12.8%	13.9%	13.1%	8.6%	6.7%
U.S. Average Farm Price (\$/bushel)	\$4.20	\$4.06	\$3.55	\$5.18	\$6.20-\$7.20 Midpoint = \$6.70

Figure 1. Trends in U.S. Corn Use and Ending Stocks: MY 2004/05 through MY 2011/12

(November 9, 2011 USDA WASDE Report)

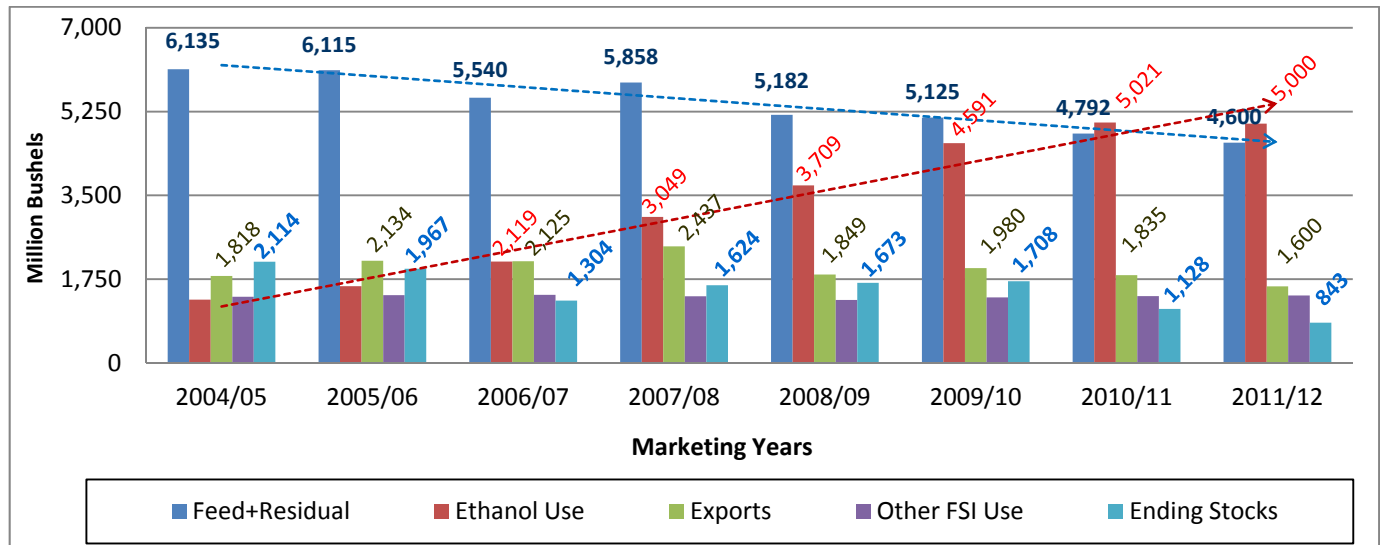


Figure 2. U.S. Corn Ending Stocks vs U.S. Avg. Cash Prices: MY 1973/74 through MY 2011/12
(November 9, 2011 USDA WASDE Report)

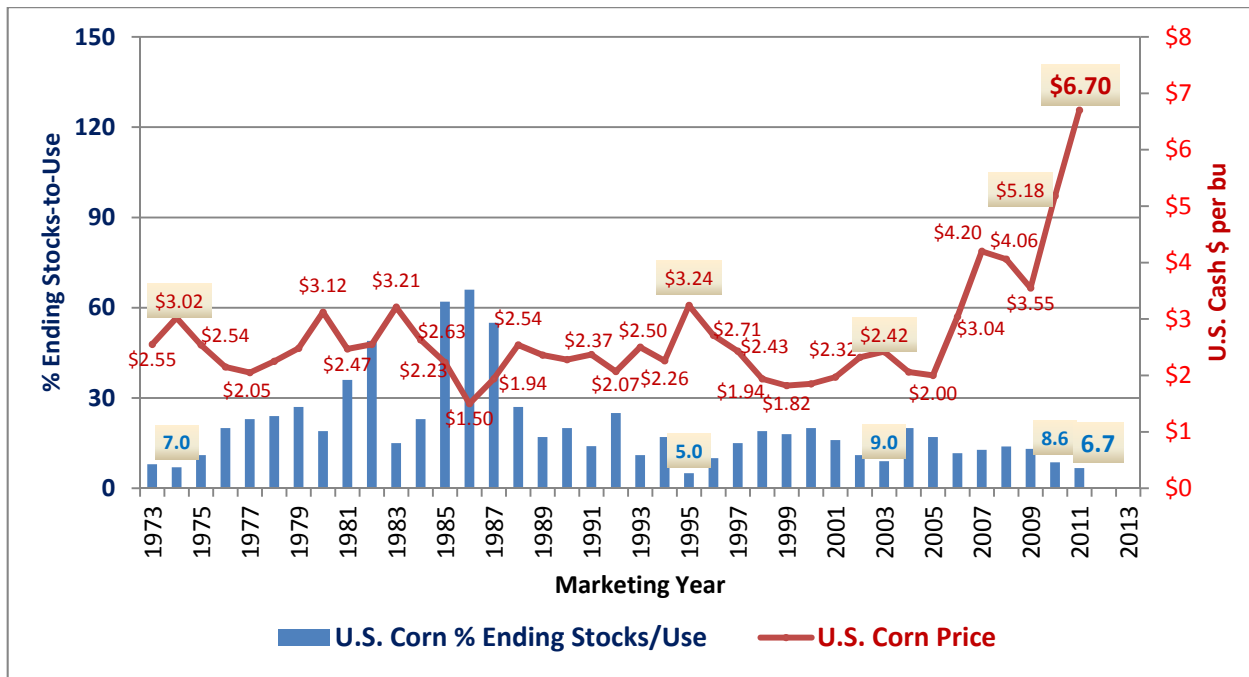
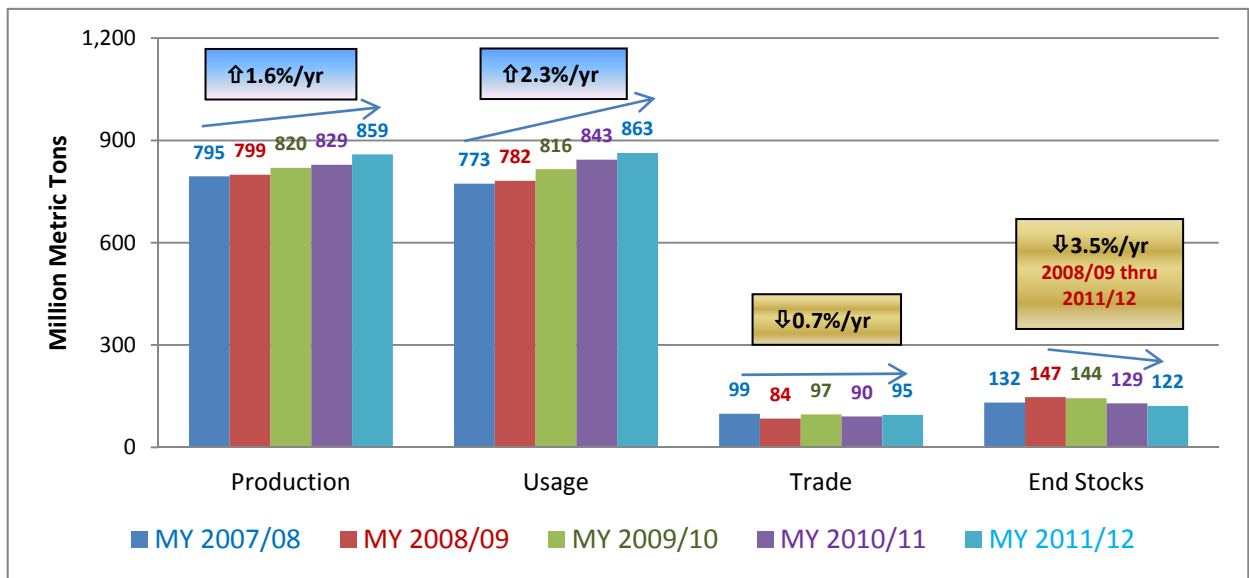


Figure 3. World Corn Usage & Ending Stocks: MY 2007/08 thru MY 2011/12
(November 9, 2011 USDA WASDE Report)



II. U.S. Grain Sorghum Market Situation and Outlook

A. **2011 U.S. Grain Sorghum Production Prospects:** The November USDA NASS Crop Production report confirmed the findings of earlier USDA reports of how extreme drought in the key U.S. grain sorghum producing states of Texas and (parts of) Kansas have markedly decreased 2011 U.S. grain sorghum yield and production prospects.

a. **Lower Yields & Unchanged Production:** The USDA projected 2011 U.S. grain sorghum average yield to be 55.5 bu/ac, up 0.5 bu from the October Crop Production report, but down from 71.8 bu in 2010 and 69.4 bu in 2009 (Table 2). United States grain sorghum production in 2011 is projected to be 246 mb (up 2 mb), which is down from 345 mb in 2010 and 383 mb in 2009. Extreme drought in 2011 and competition from other crops for acreage are primary factors leading to declining U.S. grain sorghum production in recent years.

B. **MY 2011/12 U.S. Grain Sorghum Supply-Demand Balances:** On a year-to-year basis, marginally larger grain sorghum production and total supplies as well offsetting changes in prospects for U.S. grain sorghum exports (down) and food seed and industrial usage (up), have left projected U.S. ending stocks of grain sorghum unchanged to slightly larger than a month ago. Current prospects are for continuing reductions in U.S. grain sorghum usage in MY 2011/12 (Table 2).

In the November WASDE report the USDA projected for MY 2011/12 that feed and residual use of 65 mb, unchanged from October, but down from 124 mb in MY 2010/11 and 141 mb in MY 2009/10. United States grain sorghum exports for MY 2011/12 are projected to be 90 mb, down 10 mb from October, and less than 150 mb in MY 2010/11 and 166 mb in MY 2009/10. Food, seed and industrial use in the U.S. was projected to be 90 mb for MY 2011/12, up 10 mb from October, which is comparable to 85 mb FSI use in MY 2010/11 and 90 mb FSI use in MY2009/10. Projected total U.S. grain sorghum use in MY 2011/12 of 245 mb is less than 359 mb in MY 2010/11 and 396 mb in MY 2009/10.

a. **Reduced Grain Sorghum Usage Trends:** A fundamental lack of available supplies is leading to reductions in U.S. grain sorghum usage in several major industries. All types or categories of grain sorghum usage have declined substantially since at least MY 2009/10 (Figure 4).

C. **Ending Stocks-to-Use & Grain Sorghum Prices:** Projected MY 2011/12 U.S. grain sorghum prices have responded sharply to the high side, closely following movements and trends in the U.S. corn markets – driven by tightening of U.S. feedgrain (corn, grain sorghum, barley and oats) ending stocks-to-use. The trend toward lower U.S. grain sorghum stocks which began in MY 2009/10 has continued in MY 2011/12, and is very likely to persist into MY 2012/13 (Table 2).

a. **Ending stocks** were projected at 28 mb (11.4% S/U) in MY 2011/12, compared to 27 mb (7.5% S/U) in MY 2010/11 and 41 mb (10.4% S/U) in MY 2009/10.

Commentary: The projected MY 2011/12 % ending stocks-to-use of 11.4% is higher than the current and historic minimum levels for corn (i.e., 6.7% and 5.0% S/U, respectively). That said, the current amount of U.S. grain sorghum ending stocks for MY 2011/12 is likely at minimum pipeline levels for logistical needs.

b. The USDA projected MY 2011/12 U.S. average grain sorghum prices to be record high in the range of **\$6.00-\$7.00 per bushel**, unchanged from October, but down \$0.30 on each end of the range from September, and up from \$3.22 in MY 2009/10 and from \$5.02 in MY 2010/11.

D. **World Grain Sorghum Supply-Demand Trends:** World grain sorghum usage and production have not been increasing since MY 2007/08, but rather appear to have been generally declining over the time period (**Figure 5**). It is noteworthy that World grain sorghum production has fallen at nearly twice as fast a rate as has World grain sorghum usage.

World grain sorghum trade and ending stocks have also been trending lower over the same period (since MY 2007/08) at somewhat larger rates percentage rates than have occurred for production and total usage. World grain sorghum exports have fallen at nearly twice as fast of an average rate than has World grain sorghum ending stocks. Grain sorghum is competing with corn for acreage in the U.S. and in foreign country, with corn gaining acreage and subsequent productive capacity at the expense of grain sorghum and other crops.

Table 2. U.S. Grain Sorghum Supply-Demand Balance Sheet: MY 2007/08 through MY 2011/12
(November 9, 2011 USDA WASDE Report)

Item	2007/08	2008/09	2009/10	2010/11	2011/12
Planted Area (million acres)	7.7	8.3	6.6	5.4	5.5
Harvested Area (million acres)	6.8	7.3	5.5	4.8	4.4
Yield per harvested acre (bu./acre)	73.2	65.0	69.4	71.8	55.5
	million bushels				
Beginning Stocks	32	53	55	41	27
Production	497	472	383	345	246
Total Supply	530	525	438	387	273
Food, Seed & Industrial	35	95	90	85	90
Exports	277	143	166	150	90
Feed & Residual	165	233	141	124	65
Total Use	477	471	396	359	245
Ending Stocks	53	55	41	27	28
% Ending Stocks-to-Total Use	11.1%	11.7%	10.4%	7.5%	11.4%
U.S. Average Farm Price (\$/bu.)	\$4.08	\$3.20	\$3.22	\$5.02	\$6.00-\$7.00 Midpoint = \$6.50

Figure 4. Trends in U.S. Grain Sorghum Use & Ending Stocks During MY 2004/05 thru MY 2011/12
(November 9, 2011 USDA WASDE Report)

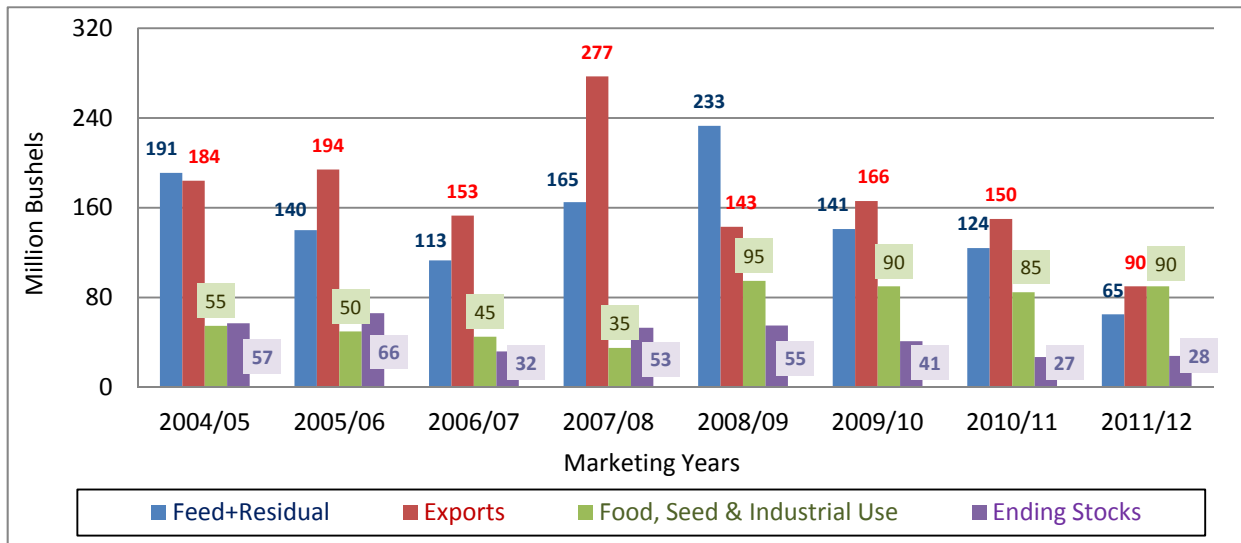


Figure 5. World Grain Sorghum Usage & Ending Stocks: MY 2007/08 thru MY 2011/12
(November 9, 2011 USDA WASDE Report)

