

Assessing the Impact of the May 2010 USDA Crop Production and WASDE Reports

Daniel O'Brien – Extension Agricultural Economist, K-State Research and Extension

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In the May 1, 2010 Crop Production and World Agricultural Supply-Demand Estimate reports, the USDA projected increased supplies and ending stocks of U.S. wheat and corn for their respective coming marketing years. The USDA also projected that increases in ending stocks would occur for U.S. soybeans in 2010-11, but that there would be no change in ending stocks for U.S. grain sorghum. Price projections for 2010-11 are marginally lower for U.S. wheat, corn and soybeans, but unchanged for grain sorghum.

Projected 2010 U.S. crop production by the USDA National Agricultural Statistical Service (NASS) assume acreage projections from the March 31, 2010 USDA-NASS Prospective Plantings report, historical relationships between planted and harvested crop acreage, and trend line yields for wheat, grain sorghum and soybeans. Corn yields for 2010 use trend line yields adjusted for earlier than normal planting progress to date in spring 2010. Consequently, these projections of crop size do not account for the possibility of weather or disease related crop production problems during 2010 for these four major crops. They represent “normal” or “large crop” production outcomes in 2010. As a result, the 2010-11 marketing year supply-demand balance sheet and price projections provided by the USDA World Agricultural Outlook Board (WAOB), represent ending stocks and price outcomes that would occur in the event of a normal or large crop, with subsequent seasonal harvest lows for wheat during the summer months and for feedgrains and oilseeds during the fall of 2010.

Along with new crop projections for the 2010-11 marketing years for these four major crops in the U.S., important adjustments were made in U.S. corn supply-demand balances for 2009-10 by the USDA World Agricultural Outlook Board. These changes reflected stronger usage and subsequently lower ending stocks than had been previously projected. Minor changes were made in U.S. grain sorghum use projections for 2009-10, with no changes made in 2009-10 supply demand projections for U.S. wheat and soybeans.

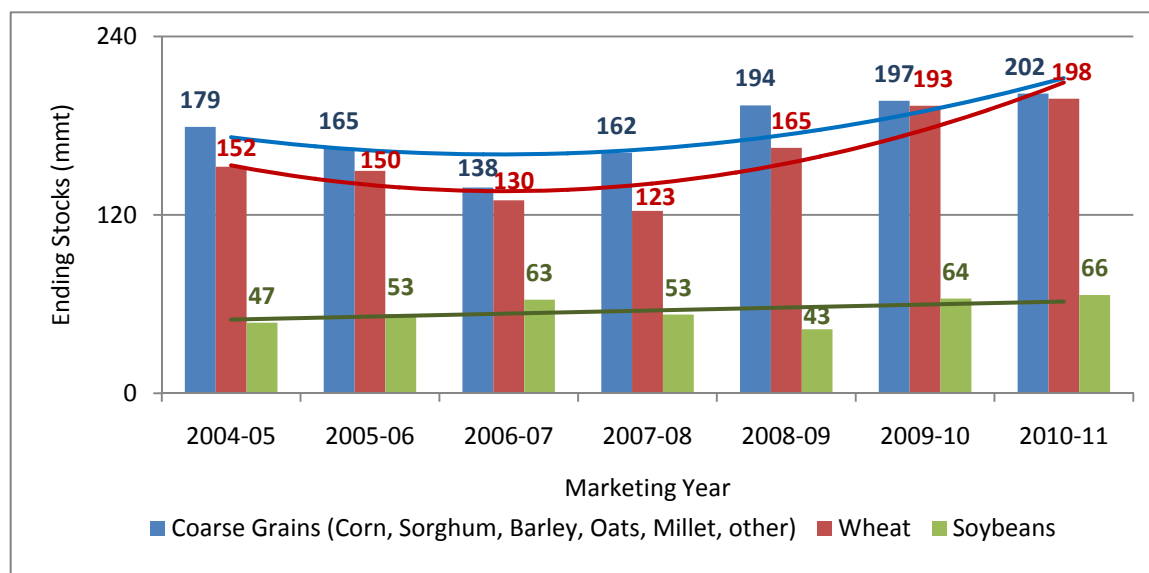
World ending stocks for wheat, corn, grain sorghum, all oilseeds in general and soybeans in particular are projected to increase from the 2009-10 to the 2010-11 marketing year. Absent the occurrence of other market upsetting factors, these simultaneous increases in world grain and oilseed supplies and ending stocks will likely be a negative factor on grain market prices in the 2010-11 marketing year. However, there remains a reasonable, objectively-based probability of crop production problems occurring for major U.S. crops in the summer of 2010 that could make grain prices extremely volatile. Such market uncertainty could provide U.S. crop producers with opportunities to sell remaining 2009 old crop inventories and to initiate new crop 2010 marketing strategies.

World Coarse Grain, Wheat and Soybean Ending Stocks

World Coarse Grain & Corn Stocks: Based on record high **World coarse grain** production and use, 2010-11 MY ending stocks are projected to be 201.5 million metric tons (mmt), an increase of 4.8 mmt from 2009-10 (Figure 1). This is the first time in a decade that World coarse grain ending stocks

have exceeded 200 mmt and continues the trend of increasing stocks since the 2006-07 MY. Most of this increase in stocks is concentrated in China. However, because of increasing levels of use, World coarse grain ending stocks-to-use has declined during the last three marketing years, from 19.9% in the 2008-09 MY to 17.9% last year, and to 16.4% in the 2010-11 MY. **World corn** ending stocks are projected to be 154.21 mmt in MY 2009-10, up 7.17 mmt from the 2009-10 MY, representing 18.6% ending stocks-to-use. World corn stocks are projected to account for 75.6% of total World coarse grain ending stocks in MY 2009-10.

Figure 1. World Ending Stocks of Coarse Grains, Wheat and Soybeans: 2004-05 through 2010-11 Marketing Years (May 11, 2010 USDA WASDE Report)



World Wheat Stocks: World wheat ending stocks for the 2010-11 MY are projected to be 198.09 mmt, up 4.72 mmt from MY 2009-10, and representing 29.7% World wheat ending stocks-to-use (Figure 1). The types of wheat aggregated together to represent total wheat supplies include hard red winter, hard red spring, soft red winter, white wheat, and durum. World wheat ending stocks of near 198 mmt during the 2010-11 MY are 59% higher than the record low level of world wheat stocks that existed during the 2007-08 marketing year, when final World wheat ending stocks were 124.43 mmt.

World Oilseed & Soybean Stocks: World oilseed ending stocks for the 2010-11 MY are projected to be 77.25 mmt, up 1.78 mmt from MY 2009-10 and representing 20.9% World ending stocks-to-use. The category of “Oilseeds” includes soybeans, sunflowers, cotton, canola, flaxseed, peanuts, and other oilseed-type crops. World oilseed ending stocks in 2010-11 represent an increase of 37% from MY 2008/09 (i.e., 55.33 mmt World oilseed ending stocks).

World soybean ending stocks are projected to be a record high 66.09 mmt in MY 2010-11, which is up 2.33 mmt from MY 2009-10, and represents 26.8% ending stocks-to-use (Figure 1). World soybean ending stocks are projected to account for 85.6% of total World oilseed ending stocks in MY 2009-10.

Interpreting Trends in World Ending Stocks Projections: Taken together, World coarse grain and wheat ending stocks are projected to have increased for three consecutive marketing years (since MY 2007-08), with World soybean ending stocks having been projected to increase for two consecutive years (since MY 2008-09). This indicates a change in the simultaneous trends towards level-to-declining world grain and oilseed ending stocks for grains and oilseeds that existed from MY 1998-99 for six to seven years thereafter. The decline of ending stocks among the major World grains that occurred for each during the same time period played a major factor in bringing about the period of major grain price volatility that occurred during MY 2007-08 and MY 2008-09. Periods of major grain price volatility still may occur in the next few grain marketing years. However, it seems less likely now than during the 2007-08 – 2008-09 period that short supplies will be the primary cause (absent major crop production disruptions and shortfalls in World grain markets).

Corn and Grain Sorghum Supply-Demand Situation

Projected Corn Supply-Demand for MY 2010-11: In its May 11, 2010 Crop Production report, the National Agricultural Statistical Service (NASS) projected 2010 U.S. corn production to be a record high 13.370 billion bushels (bb), up 260 million bushels (mb) from 2009 (Table 1). The prediction is based on a planted area of 88.8 million acres as forecast by NASS in the March 31 Prospective Plantings report (up 2.3 mln acres), harvested area of 81.8 mln ac.(accounting for corn silage production and historical acreage abandonment), and projected yields of 163.5 bushels per acre (2.7 bu/ac. over trend line yields for 1990-2009). The +2.7 bushel adjustment to trend yields was made to account for strong U.S. corn planting progress to date in the spring of 2010.

Using the USDA NASS production projections, the USDA WAOB developed overall supply-demand projections for 2010-11. Based on beginning stocks of 1.738 bb (up 65 mb from MY 2009-10) and imports of 10 mb, total supplies of U.S. corn for the 2010-11 MY are projected to be a record 15.118 bb (up 325 mb). Record high total use of 13.3 bb consisted of corn use for ethanol of 4.6 bb (up 200 mb), non-ethanol food, seed and industrial use of 1.35 bb (up 20 mb), corn exports of 2.0 bb (up 50 mb), and feed and residual use of 5.35 bb (down 25 mb). Increasing use of corn for ethanol production is based on mandates under the current federal Renewable Fuels Standard - with increasing amounts of grain-based ethanol production planned through 2015 (up to 15.0 billion gallons per year). Subsequent production of distillers grains is reflected in these numbers as this group or family of feed products are being used as a substitute for corn in livestock feed rations.

Ending stocks of U.S. corn are projected at 1.818 bb in MY 2010-11 (up 80 mb), representing 13.7% ending stocks-to-use (up from 13.4% in MY 2009-10). Average corn prices for 2010-11 were projected to be in the range of \$3.20-\$3.80 per bushel, with a midpoint of \$3.50. This compares to estimated MY 2009-10 prices in the range of \$3.50-\$3.70 per bushel (midpoint of \$3.60).

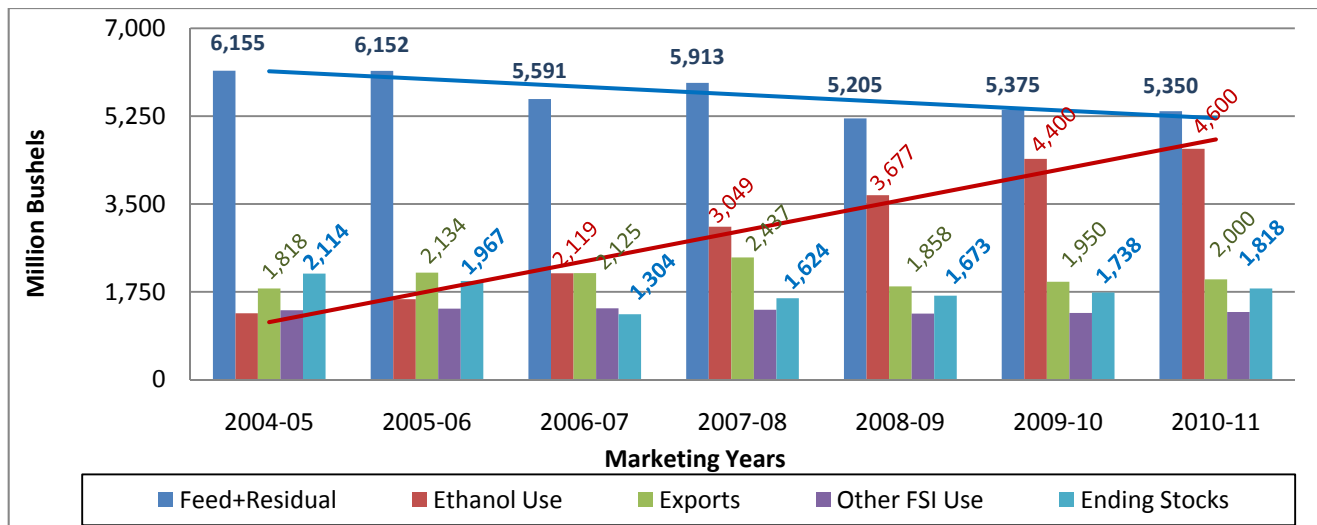
Adjustments in 2009-10 Corn Supply-Demand: The 2009 corn production forecast was lowered 21 mb to 13.110 bb due to harvest delays and losses in North and South Dakota. Use of corn for ethanol production was raised 100 mb to 4.4 bb in the May report from April, based on U.S. Energy Information Administration ethanol production data. Due to a stronger than expected export pace, the 2009-10 export estimate was raised to 1.95 bb (up 50 mb). Corn feed and residual use estimates were lowered 75 mb to 5.375 bb due to a slow recovery in animal herd numbers and increased use of distillers grains as a competing substitute for corn in livestock feed rations. As a result of these changes, MY 2009-10 ending stocks were lowered 161 mb to 1.738 bb, representing 13.4% stocks to use. The projected price range of \$3.50-\$3.70 per bushel was left unchanged.

Table 1. U.S. Corn Supply-Demand Balance Sheet: 2007-08 through 2010-11 Marketing Years
(May 11, 2010 USDA WASDE Report)

Item	2007-08	2008-09	2009-10	2009-10
Planted Area (million acres)	93.5	86.0	86.5	88.8
Harvested Area (million acres)	86.5	78.6	79.6	81.8
Yield per harvested acre (bushels/acre)	150.7	153.9	164.7	163.5
	million bushels			
Beginning Stocks	1,304	1,624	1,673	1,738
Production	13,038	12,092	13,110	13,370
Imports	20	14	10	10
Total Supply	14,362	13,729	14,793	15,118
Ethanol for fuel	3,049	3,677	4,400	4,600
Non-ethanol Food, Seed & Industrial	1,393	1,316	1,330	1,350
Exports	2,437	1,858	1,950	2,000
Feed & Residual	5,858	5,205	5,375	5,350
Total Use	12,737	12,056	13,055	13,300
Ending Stocks	1,624	1,673	1,738	1,818
% Ending Stocks-to-Total Use	12.8%	13.9%	13.3%	13.7%
U.S. Average Farm Price (\$/bushel)	\$4.20	\$4.06	\$3.50-\$3.70 <i>Midpoint = \$3.60</i>	\$3.20-\$3.80 <i>Midpoint = \$3.50</i>

U.S. Corn Use and Ending Stocks Trends During the 2004-05 – 2010-11 Period: Since the 2004-05 marketing year, U.S. feed and residual use of corn has generally declined, while use of corn for ethanol production has increased over the same period (Figure 2). Ending stocks of U.S. corn have increased since the 2006-07 marketing year, moving from 1.304 bb in 2006-07 to a projected level of 1.818 bb in 2010-11.

Figure 2. Trends in U.S. Corn Use and Ending Stocks: 2004-05 through 2010-11 Marketing Years
(May 11, 2010 USDA WASDE Report)



Projected Grain Sorghum Supply-Demand for MY 2010-11: In its May 11, 2010 Crop Production report, USDA NASS projected 2010 U.S. grain sorghum production to be a 355 mb, down 28 mb from 2009 (Table 2). This prediction is based on a planted area of 6.4 mln ac. as forecast by NASS in the March 31 Prospective Plantings report (down 200,000 acres), harvested area of 5.4 mln ac., and projected trendline yields of 65.9 bushels per acre.

Based on beginning stocks of 43 mb (down 11 mb from MY 2009-10), total supplies of U.S. grain sorghum for the 2010-11 MY are projected to be 398 mb (down 40 mb). Total use of 355 mb consisted of food, seed and industrial use of 100 mb (unchanged, and including ethanol use), exports of 140 mb (down 20 mb), and feed and residual use of 115 mb (down 20 mb).

Ending stocks of U.S. grain sorghum are projected at 43 mb in MY 2010-11 (unchanged), representing 12.1% ending stocks-to-use (up from 10.9% in MY 2009-10). Average grain sorghum prices for 2010-11 were projected to be in the range of \$2.90-\$3.50 per bushel, with a midpoint of \$3.20. This compares to estimated MY 2009-10 prices in the range of \$3.10-\$3.30 per bushel (midpoint of \$3.20).

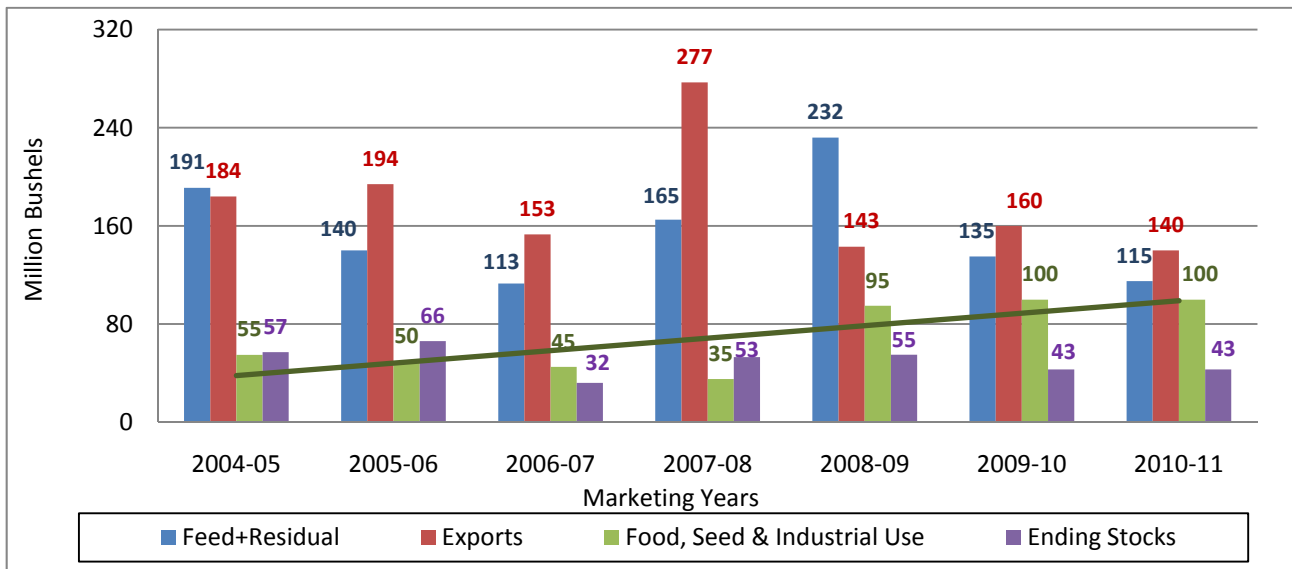
Adjustments in 2009-10 Grain Sorghum Supply-Demand: Due to a slower than expected export pace, the 2009-10 export estimate was dropped to 160 mb (down 10 mb). The grain sorghum feed and residual use estimate was lowered 5 mb to 135 mb. Resulting from these changes, MY 2009-10 ending stocks were lowered 5 mb to 43 mb, representing 10.9% stocks to use. The projected price range of \$3.10-\$3.30 per bushel was left unchanged.

Table 2. U.S. Grain Sorghum Supply-Demand Balance Sheet: 2007-08 through 2009-10 Marketing Years (May 11, 2010 USDA WASDE Report)

Item	2007-08	2008-09	2009-10	2010-11
Planted Area (million acres)	7.7	8.3	6.6	6.4
Harvested Area (million acres)	6.8	7.3	5.5	5.4
Yield per harvested acre (bushels/acre)	73.2	65.0	69.4	65.9
	million bushels			
Beginning Stocks	32	53	55	43
Production	497	472	383	355
Total Supply	530	525	438	398
Food, Seed & Industrial	35	95	100	100
Exports	277	143	160	140
Feed & Residual	165	232	135	115
Total Use	477	471	395	355
Ending Stocks	53	55	43	43
% Ending Stocks-to-Total Use	11.1%	11.6%	10.9%	12.3%
U.S. Average Farm Price (\$/bushel)	\$4.08	\$3.20	\$3.10-\$3.30 <i>Midpoint = \$3.20</i>	\$2.90-\$3.50 <i>Midpoint = \$3.20</i>

U.S. Grain Sorghum Use and Ending Stocks Trends During the 2004-05 – 2010-11 Period: Increasing use of grain sorghum in ethanol production is reflected by increased food, seed and industrial use in the 2008-09 through 2010-11 marketing years (Figure 3). Ending stocks for U.S. grain sorghum continue to remain - in the range of 32 to 66 million bushels during the 2004-05 to 2010-11 period, with 43 mb of ending stocks (12.1% stocks to use) projected for 2010-11.

Figure 3. Trends in U.S. Grain Sorghum Use and Ending Stocks Over the 2004-05 through 2010-11 Marketing Years (May 11, 2010 USDA WASDE Report)



Wheat Supply-Demand Situation

Projected Wheat Supply-Demand for MY 2010-11: In its May 11, 2010 Crop Production report, USDA NASS projected 2010 U.S. wheat production to be 2.043 bb, down 173 mb from 2009 (Table 3). This prediction is based on a planted area of 53.8 million acres as forecast by NASS in the March 31 Prospective Plantings report (down 5.3 mln acres), harvested area of 47.1 mln ac., and projected trend yields of 43.4 bushels per acre .

Based on beginning stocks of 950 mb (up 293 mb from MY 2009-10) and imports of 110 mb (down 5 mb), total supplies of U.S. wheat for the 2010-11 MY are projected to be 3.103 bb (up 115 mb from 2009-10). Total use of 2.106 bb (up 68 mb) consisted of food use of 940 mb (up 20 mb), seed use of 76 mb (up 3 mb), exports of 900 mb (up 35 mb), and feed and residual use of 190 mb (up 10 mb). The increase in food use reflects an expected decrease in the average flour extraction rate from high levels in MY 2009-10 and constant per capita flour consumption from MY 2009-10. Exports are projected to be higher due to increased competitiveness of U.S. wheat exports in world markets. Ultimately, world economic trends, currency valuations, and world wheat production in the coming year will determine U.S. wheat exports for the 2010-11 MY.

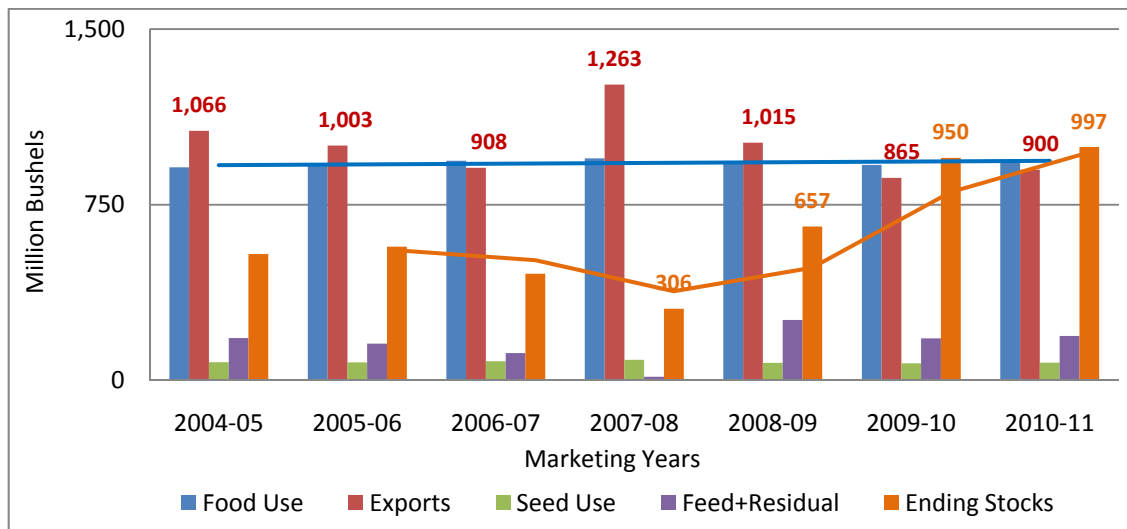
Ending stocks of U.S. wheat are projected at 997 mb in MY 2010-11 (up 47 mb), representing 47.3% ending stocks-to-use (up from 46.6% in MY 2009-10). Average wheat prices for 2010-11 were projected to be in the range of \$4.10-\$5.10 per bushel, with a midpoint of \$4.60. This compares to an estimated MY 2009-10 average prices of \$4.90.

Table 3. U.S. Wheat Supply-Demand Balance Sheet: 2007-08 through 2010-11 Marketing Years
(May 11, 2010 USDA WASDE Report)

Item	2007-08	2008-09	2009-10	2010-11
Planted Area (million acres)	60.5	63.2	59.1	53.8
Harvested Area (million acres)	51.0	55.7	49.9	47.1
Yield per harvested acre (bushels/acre)	40.2	44.9	44.4	43.4
	million bushels			
Beginning Stocks	456	306	657	950
Production	2,051	2,499	2,216	2,043
Imports	113	127	115	110
Total Supply	2,620	2,932	2,988	3,103
Food Use	948	927	920	940
Seed Use	88	75	73	76
Exports	1,263	1,015	865	900
Feed & Residual	16	258	180	190
Total Use	2,314	2,275	2,038	2,106
Ending Stocks	306	657	950	997
% Ending Stocks-to-Total Use	13.2%	28.9%	46.6%	47.3%
U.S. Average Farm Price (\$/bushel)	\$6.48	\$6.78	\$4.90	\$4.10-\$5.10 <i>Midpoint = \$4.60</i>

U.S. Wheat Use and Ending Stocks Trends During the 2004-05 through 2010-11 Period: A strong upward trend in U.S. wheat ending stocks has existed since the 2007/08 marketing year (Figure 4). U.S. wheat ending stocks have increased from 306 mb in MY 2007-08 to 657 mb in MY 2008-09 to 950 mb in MY 2009-10, to a projected level of 997 mb in MY 2010-11.

Figure 4. Trends in U.S. Wheat Use and Ending Stocks: 2004-05 through 2009-10 Marketing Years
(May 11, 2010 USDA WASDE Report)



Soybean Supply-Demand Situation

Projected Corn Supply-Demand for MY 2010-11: In its May 11, 2010 Crop Production report, USDA NASS projected 2010 U.S. soybean production to be 3.310 bb, down 49 mb from record high production of 3.359 bb in 2009 (Table 4). The prediction is based on a record high planted area of 78.1 million acres as forecast by NASS in the March 31 Prospective Plantings report (up 600,000 acres), harvested area of 77.1 mln ac., and projected trendline yields of 42.9 bushels per acre.

Based on beginning stocks of 190 mb (up 52 mb from MY 2009-10) and imports of 10 mb (down 5 mb), total supplies of U.S. soybeans for the 2010-11 MY are projected to be 3.510 bb (down 2 mb). Total use of 3.144 bb (down 179 mb) consisted of domestic crushings of 1.64 bb (down 95 mb), exports of 1.35 bb (down 105 mb from the record high 1.455 mb in MY 2009-10), seed use of 88 mb (down 3 mb), and residual use of 66 mb (up 24 mb). Sizable declines in projected 2010-11 exports of soybean meal (down 21%) and soybean oil (down 32%) are reflected in the lower domestic soybean crushings projection for MY 2010-11. Use of soybean oil for biodiesel production (in the form of methyl ester) is projected to be up 32% in MY 2010-11.

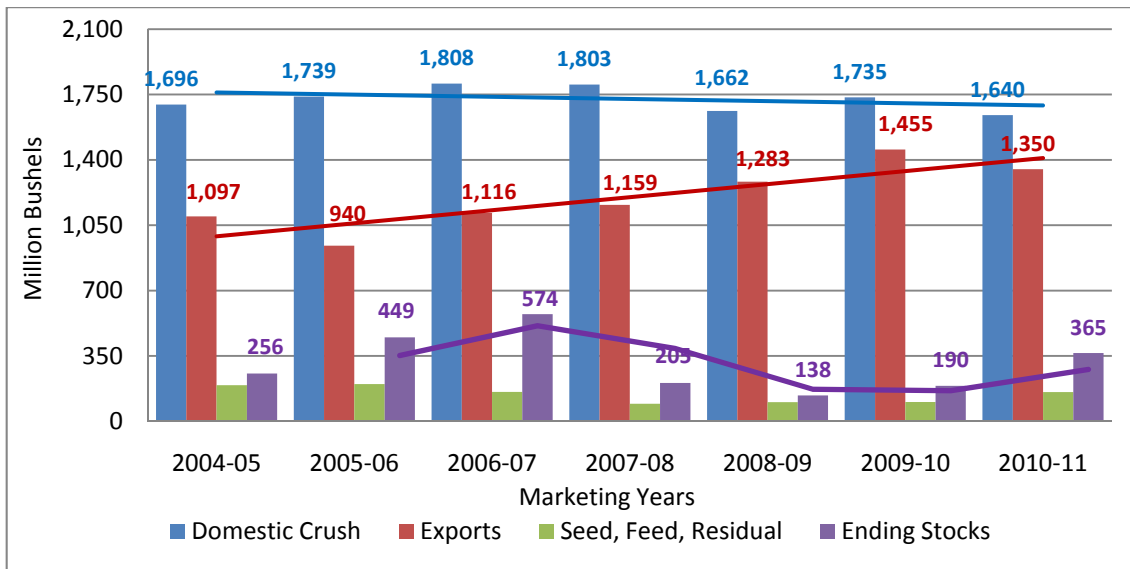
Ending stocks of U.S. soybeans are projected at 365 mb in MY 2010-11 (up 175 mb), representing 11.6% ending stocks-to-use (up from 5.7% in MY 2009-10). Average soybean prices for 2010-11 are projected to be in the range of \$8.00-\$9.50 per bushel, with a midpoint of \$8.75. This compares to an estimated MY 2009-10 average price of 9.50 per bushel.

Table 4. U.S. Soybean Supply-Demand Balance Sheet: 2007-08 through 2009-10 Marketing Years
(May 11, 2010 USDA WASDE Report)

Item	2007-08	2008-09	2009-10	2010-11
Planted Area (million acres)	64.7	75.7	77.5	78.1
Harvested Area (million acres)	64.1	74.7	76.4	77.1
Yield per harvested acre (bushels/acre)	41.7	39.7	44.0	42.9
	million bushels			
Beginning Stocks	574	205	138	190
Production	2,677	2,967	3,359	3,310
Imports	10	13	15	15
Total Supply	3,261	3,185	3,512	3,512
Domestic Crushings	1,803	1,662	1,735	1,640
Exports	1,159	1,283	1,455	1,350
Seed	89	90	91	88
Residual	5	12	42	66
Total Use	3,056	3,047	3,323	3,144
Ending Stocks	205	138	190	365
% Ending Stocks-to-Total Use	6.7%	4.5%	5.7%	11.6%
U.S. Average Farm Price (\$/bushel)	\$10.10	\$9.97	\$9.50	\$8.00-\$9.50 <i>Midpoint = \$8.75</i>

U.S. Soybean Use and Ending Stocks Trends During the 2004-05 through 2010-11 Period: U.S. soybean exports were trending higher from the 2005-06 marketing year, but are forecast to be somewhat lower than the record high of MY 2009-10 (1.455 bb) in MY 2010-11. (Figure 5). Projected MY 2010-11 ending stocks of 365 mb would be the largest since MY 2007-08, but lower than the levels of the 2005-06 and 2006-07 marketing years.

Figure 5. U.S. Soybean Use and Ending Stocks: 2004-05 through 2010-11 Marketing Years
(May 11, 2010 USDA WASDE Report)



Thoughts on the Relevance of World versus U.S. Supply-Demand Measures in Determining Grain Prices

In markets where the U.S. plays the strongest role as an export supplier, that “on the margin”, what happens in the U.S. has a market leadership or a predominant effect on World grain prices. For instance, in the World coarse grain market, the U.S. is projected to export 48% of all coarse grain exports in the 2010-11 marketing year. For corn (a subset of coarse grains), the U.S. is projected to export 57.4% of all 2010-11 corn exports. Argentina (17.5%) and Brazil (13.8%) are the next largest projected corn export competitors in 2010-11. Given the predominant position of the U.S. in coarse grain and corn export markets, it seems that what happens in the U.S. in terms of production, use and ending stocks essentially “drives” or “nearly determines” the world market.

In soybeans, the U.S. still has a strong competitive market position, but is not as predominant in its market position as in coarse grains/corn. In the 2010-11 marketing year, the U.S. is projected to export 41.8% of world soybeans, compared to 32.9% for Brazil and 14.2% for Argentina. Of course, Argentina makes up some of this difference with strong soybean meal and soybean oil exports, projected to be 51.7% (sbm) and 57.4% (soyoil) of the world total in 2010-11, followed by Brazil (20.9% sbm – 14.2% soyoil) and the U.S. (14.1% sbm – 11% soyoil). So, what happens in the U.S. in soybean production, crush, exports and ending stocks has a major impact on the world market, but not as much by itself as in the corn market, where export competitors from South America don’t have as much of a market share.

Regarding wheat, the U.S. is still a major export competitor, but due to the smaller market share it has of wheat exports (than for corn and soybean-soy products), it has less of a strong market position and consequently is in less of a position to directly influence world wheat prices. In the 2010-11 marketing year the U.S. is projected to export 19.0% of the world’s wheat exports, followed by both Russia and Canada (13.5%), Australia (10.8%), Kazakhstan (5.8%), and Argentina and the Ukraine (5.4%). The U.S. does not have the same level of market predominance in wheat as it has in coarse

grains / corn and soybeans / soy products. Consequently, the influence of U.S. supply-demand changes on World wheat market levels and trends is proportionately less (standing by itself) than in those other markets.

When weighing the impact of world versus U.S. market influences on grain prices, that impact varies by commodity. For corn, on the margin, what happens in the U.S. is likely the major market moving influence on prices. For soybeans / soy products, the U.S. shares that leadership role with its South American companions. For wheat, the U.S. is in more in the position of being “1st among equals”, with shared, competitive world wheat market dynamics predominating. It is an issue of “either the world or the U.S.” dominating world grain markets, but rather one of “how strong a leadership role is played by the U.S. in each grain marketing arena (i.e., commodity)”.