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OUTLOOK FOR U.S. AGRICULTURE IN 2013

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I would like to welcome everyone to this year's 89th annual Agricultural Outlook Forum. Despite a historic drought affecting much of U.S. agriculture, the U.S. agricultural economy is strong and, in aggregate, farm incomes are near record highs. U.S. agricultural exports are expected to break records again this fiscal year and the financial outlook for the sector remains solid, with debt measures low relative to assets and equity, and asset values at record levels.

However, aggregate measures belie differences between sectors. Row crop producers have generally fared well despite the adverse weather, in large part due to higher prices and federal crop insurance programs which have helped offset yield losses. For uninsured producers or producers of crops for which insurance is unavailable, crop losses have had a more adverse effect. For the third time since 2007, livestock, dairy and poultry producers have experienced sharply higher feed costs, this year combined with poor pasture conditions, with limited safety net programs on which to fall back.

The outlook for 2013 calls for a rebound in crop yields resulting in record production levels for corn and soybeans, and by autumn 2013, lower prices for most grains and oilseeds. Lower crop prices should lead to lower feed costs and improved profitability for the livestock, dairy and poultry sectors.

Listening to the forecast for 2013, one may have a sense of déjà vu, for the forecast is similar to the last year's forecast for record corn and soybean crops made at last year's Outlook forum. Yet, instead of a record corn crop, we saw record high corn prices. Instead of herd rebuilding, there was further liquidation as livestock margins tightened. So while the outlook for 2013 remains bright, there are many uncertainties. I will address some of the risks facing agriculture in my comments today.

Outlook for U.S. Agricultural Exports

U.S. agricultural exports for fiscal year (FY) 2013 are projected at \$142 billion, down \$3 billion from the November 2012 forecast, but \$6.2 billion above FY 2012 levels and a record in nominal terms after adjusting for inflation (figure 1). The pace of exports this year has been impressive. In the first three months of the fiscal year the United States exported \$43 billion of agricultural products, greater than what we exported *annually* in the early 1990s. Imports for FY 2013 are forecast at \$112.5 billion, also a record. The agricultural trade balance for FY 2013 is forecast at \$29.5 billion.

Exports to China are projected to be \$22 billion, down \$1.4 billion from last year's record, but for the second straight year edging out Canada (\$21 billion) as the number one market for U.S. agricultural exports (figure 2). U.S. agricultural exports to China have grown, on average, almost 20 percent annually since FY 2005. Soybeans and cotton have dominated U.S. agricultural exports to China, accounting for as much as 75 percent of total agricultural exports in recent years, although red meats, coarse grains, and feeds and fodder have all shown strong growth (figure 3).

With the exception of corn, export values are up for grain and oilseeds in FY 2013 (figure 4). Soybean exports are projected to exceed \$22 billion in FY 2012, a record level if realized. Meat exports are projected up 1.3 percent with increased beef and veal and poultry exports offsetting a small decline in pork exports. Dairy product exports are forecast down 3.3 percent while exports of horticultural products are up almost 12 percent over FY 2012 levels.

Increases in export values for FY 2013 are largely attributed to higher commodity prices as export volumes are projected to decline for many commodities (figure 5). Rice and wheat exports are exceptions—both are projected to be higher in volume and value in FY 2013. Despite record levels in value, soybean exports are projected to decline by almost 5 percent in volume due to drought-reduced supplies. Corn exports for FY 2013 are projected at just 24 million tons, down almost 38 percent from FY 2012 levels. U.S. corn exports are projected to be at their lowest levels since the early 1970s in volume. In part due to record corn production, reduced domestic use and available export capacity, Brazil will likely overtake the United States as world's largest corn exporter in FY 2013 (figure 6). While the United States will likely regain

its position as largest corn exporter in FY 2014, the low levels of exports projected for FY 2013 reflect the magnitude of this year's drought on the U.S. corn balance sheet.

Outlook for Crops

Tomorrow, our commodity analysts will go through USDA's projected balance sheets in detail; today, I will confine my comments to what I see are the major trends in the current supply and demand outlook for the major field crops.

Global grain stocks tighten in 2012/13; cotton stocks increase as China increases its public inventories. The droughts in North America, southern Europe and the Black Sea region sharply reduced wheat, corn, and soybean supplies. Global wheat stocks for 2012/13 are projected to be at their lowest level as a percent of use since 2008/09 (figure 7). Global corn stocks as a percent of use are projected to be the lowest since 1973/74. Despite record production, strong demand reduced global rice stocks as well. Soybeans stocks are anticipated to increase reflecting large anticipated production in the Southern Hemisphere, but stocks as a percent of use will remain below 2010/11 levels. Large global supplies should lead to stock rebuilding in 2013/14, but markets will remain volatile until production levels are known with more certainty.

Global cotton stocks are projected for 2012/13 at 82 million bales, a record high and up 19 percent from last year. Most all of the increase has been in China where government policies have resulted in large acquisitions of cotton stocks to bolster producer prices (figure 8). With China forecast to hold over 50 percent of world stocks, the world cotton outlook will depend on the sustainability of such policies over the longer run.

High prices will encourage strong supply response. High grain and oilseed prices support another year of large plantings for wheat, corn and soybeans. Combined acreage for those crops topped 230 million acres in 2012, the highest since 1982, and will likely approach similar levels for 2013. Conservation Reserve Program (CRP) enrollments are down again for 2013/14 to 27.1 million acres. Total CRP area has declined 9.7 million acres from its peak in 2007/08. Much of the 2.4 million acres which left the CRP last fall was located in the Northern Plains, in regions where wheat has been more traditionally grown but where corn and soybeans have made inroads in recent years (figure 9).

Wheat seedings are projected at 56 million acres, up 300,000 from 2012 (figure 10). Hard Red Winter (HRW) wheat area is down 0.7 million acres from 2012 due to the drought, but the decline has been offset by increased seedings of Soft Red Winter (SRW) wheat, up 1.3 million acres from 2012 levels. Spring wheat seedings (including durum) are projected to decline due to more profitable returns for corn and soybeans.

A return to more normal spring weather should result in more soybeans and slightly less corn planted in 2013. Corn planted acreage is projected at 96.5 million acres, down slightly from last year's 75-year high. Soybean acreage is projected at 77.5 million acres which, if realized, would equal the record high level reached in 2009. Increased SRW wheat seedings will likely increase double-cropping and reduced CRP area in the upper Midwest could further boost soybean area.

U.S. upland cotton area for 2013 is projected at 9.8 million acres, a decline of 2.3 million acres from 2012, and reflects lower expected returns for cotton relative to alternative crops (corn and soybeans in the southeast and Delta States and wheat, corn and sorghum in the Southwest). Similarly, a small decline in long grain rice area is expected in the Delta where expected returns to soybeans look more favorable for 2013.

Yields for spring-planted crops are projected to rebound from drought levels, but weather remains key. Much attention will be focused on weather this spring. As of February 12, about 56 percent of the United States continued to be in drought conditions (figure 11). While the percentage of area in drought has declined about 5.4 percentage points since January 1, forecasts point to continued dryness in the central and southern Great Plains.

Weighted by seeded area, the hard-red winter wheat states of Kansas, Nebraska, and Oklahoma have 50 percent of their wheat crop rated in poor or very poor condition compared to just 10 percent at this time last year. Spring rains will be especially important in the Great Plains this year where elevated levels of abandonment are expected.

Nationally, wheat production is projected to be 2.1 billion bushels, down 7.4 percent from 2012 levels (figure 12). The decline is attributed to higher abandonment rates and a return to trend yield from last year's record level. Rice and cotton production are also forecast lower, largely reflecting lower planted area and a return to trend yields. About 57 percent of cotton production

is located in regions currently in drought condition. If these conditions persist or worsen, there would likely be adverse impacts on planted area, abandonment rates and crop yields.

Assuming normal weather conditions for spring planting and summer crop development, USDA is projecting a return to trend yields resulting in record crops for corn and soybeans in 2013.

There has been much discussion about the effects of last year's drought on corn and soybean yields in 2013. A number of factors suggest that corn and soybean yields will likely to return to trend. First, we have already seen some improvement in the eastern Corn Belt. While much of Indiana and Illinois was in drought throughout much of the summer, fall and winter rainfall has improved conditions there. Second, studies suggest that there is little correlation between seasonal precipitation in one year and the next. A dry summer in 2012 has little implication for summer precipitation in 2013. Third, research shows that corn and soybean yields are largely determined by summer weather conditions, with July weather being the most important. There is little evidence to suggest that low pre-season moisture levels have significant impacts on corn and soybean yields (figure 13).

Blend wall constrains corn use for ethanol. From 2005/06 to 2010/11, corn use for ethanol in the United States grew by over 680 million bushels annually, topping 5 billion bushels in 2010/11 and 2011/12. With higher corn prices due to the drought, ethanol production margins tightened considerably this past summer. As a result, weekly production numbers (on an annualized basis) fell below the allowable cap for conventional ethanol under the Renewable Fuel Standard and have remained below the cap since mid-July (figure 14). Projected corn use for ethanol has been reduced for the 2012/13 marketing year to 4.5 billion bushels. A record corn crop for 2013/14 should improve ethanol production margins and lead to increased ethanol production. Corn use for ethanol is projected at 4.675 billion bushels for 2013/14, up 175 million bushels from last year, but below 2011/12 levels (figure 15).

Several factors will likely hinder further growth in corn use for ethanol over the next few years. One, U.S. gasoline consumption has been declining since 2008. At the time the Energy Act of 2007 was passed, forecasts by the Energy Information Administration for gasoline consumption implied almost 150 billion gallons of blended gasoline by 2014 (figure 16). Increased fuel efficiency and fewer miles driven due to the slow economic recovery have caused gasoline consumption to decline. Current EIA forecasts of blended gasoline fuel consumption in 2013 are

less than 134 billion gallons, 16 billion less than forecasts made in 2008. Two, ethanol penetration rates remain near 10 percent as growth in higher blends (E15 and E85) remains limited. Current penetration rates would imply a blend wall of less than 13.4 billion gallons for ethanol. Ethanol produced in excess of that amount must be held as stocks or exported. Lastly, while export markets have provided an outlet in past years for excess ethanol production, current export prospects are reduced because of increased competition from Brazil and potential trade restrictions for exports to the European Union.

Prices for most grains and oilseeds to fall in 2013/14. Farm prices for most grain and oilseeds will be lower, reflecting larger domestic and world supplies [figure 17]. A return to trend yields will likely push corn prices down significantly as stock levels rebuild. Corn prices are forecast to average \$4.80 per bushel in 2013/14, down 33 percent from 2012/13's record levels and, if realized, the lowest average price since the 2009/10 marketing year. Likewise, larger supplies and increased carryout will weaken soybean prices to \$10.50 per bushel, down 27 percent. Cotton prices are expected to increase by 3 percent to 73 cents per pound for 2013/14, reflecting tighter domestic supplies. Rice prices are projected at \$15.20 per cwt, up 30 cents from the midpoint of 2012/13's price, in part reflecting smaller domestic supplies and ending stocks.

Outlook for Livestock, Dairy and Poultry

Livestock, dairy and poultry producers faced high feed costs for most of 2012 and high prices are likely to persist through much of 2013 until new crops become available in the fall. Feed ratios, which have generally been tight since 2007, tightened further in 2012 as feed costs rose relative to meat and dairy prices (figure 18). While productivity gains have offset some of the decline in feed ratios, margins have been tight throughout the second half of 2012 and into 2013.

In addition to high feed costs, cattle producers have been particularly hard hit by poor pasture conditions and a poor hay crop. Almost two-thirds of the Nation's pasture and hay crops were in drought conditions with almost 60 percent of pasture condition rated poor or very poor for most of July, August and September 2012. As was mentioned previously, dryness in the Southern Plains has persisted for over two years and resulted in large liquidation in cattle numbers. The January 1 NASS *Cattle* report indicates that most of the decline in the U.S. cattle herd has been in the central and southern Plains. Cattle and calf numbers in Kansas, Oklahoma and Texas

declined by 3.4 million head between 2011 and 2013, a reduction of 13.6 percent. During the same period, the U.S. cattle herd declined about 3.6 percent. The U.S. cattle and calf herd is at its lowest level since 1952.

Likewise dairy producers were adversely affected by high feed costs and poor pasture conditions. High temperatures during the summer also adversely affected milk production. As a result of high feed costs, milk feed ratios have remained near the low levels experienced during 2009.

Strong pork and broiler exports helped keep margins higher than they would have been otherwise, but high feed costs have limited hog, poultry and dairy expansion. Prices for livestock, dairy and poultry products are all forecast up in 2013 (figure 19). Nonetheless, the livestock, dairy and poultry sectors face continued tight margins in 2013, at least until new crop feed grains and soybeans reach the market in the late summer and fall. Another year of below trend yields and high prices would likely result in further liquidation.

Outlook for Food Prices

Higher crop and livestock prices will drive consumer prices higher in 2013 but the increase should be small relative to increases in recent years. Food inflation is currently low. The Bureau of Labor Statistics reports that all-food prices in December 2012 were 1.8 percent higher than levels in December 2011 (figure 20). Food-at-home prices rose 1.3 percent over the same period. While food inflation is anticipated to rise in 2013, the levels are unlikely to approach the levels reached in 2008 and 2011. USDA forecasts that food prices will increase only between 3 to 4 percent in 2013. Inflation is expected to remain strong, especially in the first half of 2013, for most animal-based food products due to higher feed prices. Food inflation is expected to be above the historical average for categories such as cereals and bakery products as well as other foods.

Farm Income

On February 11, USDA's Economic Research Service (ERS) released its revised farm income forecast for 2012 as well as its first forecast of farm income for 2013. For 2012, net cash income is forecast at \$135.6 billion, a record in nominal terms and, the highest since 1973, adjusting for inflation. Farm cash receipts are forecast at \$391 billion, up \$17 billion over 2011 levels. Crop

receipts are estimated at \$220 billion, up 5.4 percent over 2011, while livestock receipts are up 3.4 percent to \$172 billion. Total expenditures are up as well, with feed costs forecast to rise 16.6% to \$64 billion reflecting higher grain and oilseed prices. Other farm income, which includes crop insurance indemnities covering the 2011 and 2012 crop years, is forecast to be \$31.3 billion in 2012, up 20 percent over 2011 levels.

As of February 18, 2013, \$14.7 billion in indemnity payments had been made to producers of 2012 crops suffering crop or revenue losses. Indemnity payments for 2012 losses continued to be made and it is likely that total indemnity payments could be as high as \$17 billion, larger than last year's record \$10.8 billion paid on 2011 crop year losses.

For 2013, ERS projects net cash income to be \$123.5 billion, a decline of almost 9 percent. Total cash receipts are forecast at \$393 billion, up marginally from 2012 (figure 21). Crop receipts are forecast to decline 1.5 percent from 2012 levels to \$216 billion while livestock receipts are forecast to increase 2.8 percent from 2012 levels to \$177 billion. Feed costs are expected to increase by \$4 billion to almost \$68 billion. Other large increases in production expenses are forecast to be rental expenses, up \$1.7 billion and labor costs, up almost \$3 billion.

While net cash income is projected to fall in 2013, net farm income is forecast at \$128 billion, a nominal record and, if realized, would be the highest level in real terms since 1973. The increase in net farm income in 2013 reflects projected increases in farm inventories in 2013 due to the expectation of trend yields and increased crop production.

ERS forecasts that average farm business income, after rising in 2012, will fall for most row crop producers in 2013 (figure 22). Higher production expenses will likely offset record farm cash receipts. Net cash income is forecast lower in 2013 for all livestock farm businesses due to higher feed costs (figure 23). Feed costs are forecast up 6 percent for 2013 and make up 51 percent of expenses for dairy, 19 percent for beef cattle, 42 percent for hogs, and 35 percent for poultry farm businesses.

Farm equity is forecast to increase to record levels in 2012 and 2013. The farm debt-to-asset ratio for 2013 is forecast at 10.2 percent, the lowest level, if realized, since ERS began calculating the measure in 1960. Farm assets in 2013 are forecast at a record high \$2.732

trillion, a record high in both nominal and real terms. Farm real estate is forecast at \$2.35 trillion, up 7.5 percent over 2012 levels (and up 15.7 percent over 2011 levels). Real estate debt is forecast to decline by \$3 billion (2 percent) in 2013 but this decline will likely be offset by increases in non-real estate debt which is forecast to increase by almost \$12 billion from 2012 levels.

Conclusions

As was mentioned at the outset, this year's outlook is similar to the picture painted last year: High prices ahead of planting should encourage large corn and soybean acreages, and assuming normal yields, stock levels should rebuild and prices should moderate in 2013/14. Lower feed costs will bring relief to livestock, dairy and poultry producers and allow modest expansion over the next 12 months.

A key uncertainty is whether the historic drought of 2012 persists through 2013. Another year of drought would likely result in large liquidation and hardship for livestock producers. Historical odds favor a rebound in crop yields, however, which should bring significantly lower prices in 2013.

Thanks again and enjoy this year's Forum.