STATEMENT OF JOSEPH GLAUBER CHIEF ECONOMIST, U.S. DEPARTMENT OF AGRICULTURE BEFORE THE U.S. SENATE COMMITTEE ON AGRICULTURE, NUTRITION AND FORESTRY

February 14, 2013

Chairwoman Stabenow, Ranking Member Cochran and other Members of the Committee, thank you for the opportunity to be at today's hearing on the impacts of recent drought and other weather extremes that have adversely impacted crop and livestock production in the United States. 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. 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 from the federal crop insurance programs which have helped offset losses. For uninsured producers or producers of crops for which insurance is unavailable, crop losses have had a more adverse effect. Livestock producers experienced high feed costs and poor pasture conditions, with limited programs to fall back on, particularly since key livestock disaster programs authorized under the 2008 farm bill are currently unfunded.

My testimony will focus on direct impacts of the 2012 summer drought on crop and livestock producers and actions that the Department of Agriculture has implemented to help those in need of relief from this drought. However, other adverse weather events were at work as well in 2012. For example, Florida citrus production experienced sub-freezing temperatures in early January 2012 and tree crop producers in Michigan, Ohio, Pennsylvania and New York were hard hit by an early spring freeze. The western Corn Belt and Southern Plains currently are running a severe water deficit that has implications for the current winter wheat crop, pasture conditions for livestock, and the upcoming spring planting season. Some of my discussion draws upon USDA's updated farm financial outlook and the 2013 USDA Agricultural Projections, both released on February 11. We will update that information in more detail at USDA's Agricultural Outlook Forum on February 21-22, 2013.

Effects of Drought on Crop Conditions

The heat and rainfall deficit conditions that characterized the summer of 2012 were well outside the range of normal weather variation. To focus on the 2012 drought as a single isolated event does not reflect the range of conditions that farmers and ranchers had to deal with over the past 24 months. While the droughts of 2011 and 2012 appear to be separate events, a look at the spatial coverage indicates that many areas—such as parts of northern Texas, Oklahoma, Kansas and Colorado—were hard hit in both 2011 and 2012 as the drought migrated northward (figure 1).

In late June 2011, a relatively small but intense drought afflicted much of the nation's southern tier, with the southern Plains particularly hard hit. Texas saw a 50-percent reduction in wheat production in 2011 and record cotton abandonment. Nationally, crop insurance indemnities for the 2011 crop year totaled a then record \$10.8 billion, with over \$4.1 billion paid out to producers in Kansas, Oklahoma and Texas. Due to the effects on pasture, the drought conditions in 2011 particularly affected livestock producers in the southern Plains. While winter rains brought limited relief to some of the drier areas of Texas and Oklahoma, drought persisted in much of the area into early 2012.

Continued dry conditions in May and June coupled with the underlying long-term precipitation deficits from 2011 led to an intensification of drought conditions in the southern Plains during the summer. Severe drought conditions (D4) spread into the central Corn Belt. With the eastward movement of drought conditions, crop conditions in the Corn Belt deteriorated rapidly (table 1). In early June 2012, less than 10 percent of the corn and soybean crop was rated poor or very poor. By early August, almost 90 percent of these crops were located in areas affected by drought and the percent of the corn and soybean crops rated poor or very poor had risen to 50 percent and 40 percent, respectively. Sorghum, too, was hard hit, with about half of the crop rated poor or very poor by mid-August. The cotton crop, while not as bad as 2011, was rated about 30 percent poor or very poor by late August 2012. Most of the cotton area rated poor or very poor was located in Texas which was experiencing its second year of abnormally dry conditions.

Some areas and crops fared better. While much of the Southeast was in drought in early 2012, the region received timely rains. Crop conditions for peanuts and cotton in the region were actually more favorable than previous years. Spring wheat matured before dryness spread to the Northern Plains in late summer and hence only about 11 percent of the crop was rated poor or very poor just prior to harvest. Conditions for soft red winter wheat were also generally good as much of the crop was harvested before drought intensified in the eastern Corn Belt in June and July 2012.

Impacts on Crop Production and Use

What had started out as a promising year for U.S. crop production, with favorable planting conditions supporting high planted acreage and expectations of record or near-record production, turned into one of the most unfavorable growing seasons in decades. Crop production estimates for several major crops declined throughout the summer as the drought intensified, and by January 2013, USDA's National Agricultural Statistics Service (NASS) final production estimate for corn was down 27.5 percent from USDA's May 2012 projection (USDA's first projections for major crops), while soybeans fell 6 percent over the same period (table 2). Those declines reflect sizeable reductions in crop yields per harvested acre, and for corn, a smaller-than-normal harvested share of planted cropland. Sorghum production also declined significantly—26 percent—between May 2012 and January 2013, but 2012 production levels are now expected to exceed 2011 levels by nearly 20 percent, reflecting higher acreage despite yields estimated 9 percent below 2011. Final production estimates for rice, cotton and wheat were higher than May projections, reflecting better growing conditions as discussed above.

Corn. With the highest plantings since 1937 and expectations of record yields due to early planting progress, expectations in May 2012 suggested a record crop of 14.8 billion bushels. The drought sharply reduced yields and harvested acreage. Final production estimates in January 2012 were over 4 billion bushels less than what had been expected in May. With sharply higher prices, demand has been rationed. Feed and residual use is now estimated at 4.45 billion bushels, down 18 percent from the May 2012 projection (table 2). Margins for ethanol producers fell in the summer reflecting higher corn prices (figure 2). As a result, weekly ethanol production (on an annualized basis) began to fall below the allowable cap for conventional ethanol under the

Renewable Fuel Standard and has remained below the cap since mid-July (figure 3). Projected corn use for ethanol has been reduced for the 2012/13 marketing year to 4.5 billion bushels, a reduction of 10 percent from May 2012 projections. Exports saw the largest proportionate decline due to drought-reduced production, with estimates falling to 950 million bushels, a 50-percent reduction from the May projection, and, if realized, the lowest corn exports since 1971/72.

Corn ending stocks are estimated at 602 million bushels for 2012/13. That is down 39 percent from 2011/12 carryout and down almost 1.3 billion bushels from carryout levels anticipated in May 2012. The monthly average farm price, as measured by NASS, hit record levels in August at \$7.63 per bushel. The average farm price for corn for 2012/13 is estimated to be \$7.40 at the midpoint, and, if realized, will be 19 percent above last year's average price.

Soybeans. Soybean prices rose in early 2012 due to poor crops harvested in Brazil and Argentina in the winter and early spring. The drought pushed soybean farm prices to record highs in the United States, where they reached \$16.30 per bushel in September 2012. Lower production and higher prices saw estimated soybean crush for 2012/13 reduced to 1.6 billion bushels, down 3 percent from May 2012 projections. Export estimates were reduced to 1.35 bushels, down 10 percent from May expectations. Ending stocks for 2012/13 are estimated at 135 million bushels. The average farm price for 2012/13 is estimated at \$14.25 at the midpoint of the range, an increase of 14 percent over last year's price.

<u>Sorghum</u>. Like corn, a sharply reduced sorghum crop from the May projection will result in significant demand rationing in 2012/13. Exports are now estimated at 65 million bushels, down 75 percent from the May 2012 projection. Likewise, food, seed and industrial use of sorghum is estimated at 60 million bushels, down 30 percent from the May projection. Feed use, however, will likely increase given reduced corn supplies and poor pasture conditions in sorghum growing areas in the Southern Plains.

Wheat. Despite relatively good yields, wheat prices soared in the summer, in part due to a poor wheat yields in Russia, Ukraine and Kazakhstan, as well as increased demand for feed use due to the poor corn crop. Estimated feed and residual use for wheat for 2012/13 was increased to 350

million bushels, a 52 percent increase over the May 2012 projection, due to strong implied feed use in the September-November 2012 quarter. Exports are estimated at 1.05 billion bushels, down 9 percent from the May projection. Ending stocks are currently forecast at 716 million bushels. The average farm price for wheat for 2012/13 is estimated at \$7.90 per bushel, a record, if realized, and 9 percent higher than last year's average price.

<u>Rice.</u> Record high rice yields in Arkansas, Louisiana, Missouri, and Texas offset short grain rice yield losses in California. Production was estimated at almost 200 million hundredweight (cwt), 9 percent higher than the May 2012 projection. Global rice production was a record in 2012 which contributed to some weakness in world rice prices from estimates made earlier in the spring. Nonetheless, the season average farm price for rice for 2012/13 is estimated at \$14.90/cwt, which would be 4 percent above last year's price if realized and a record.

Cotton. Global production continued to outstrip demand in 2012/13, leading to an increase in projected ending global stocks to almost 80 million bales. Texas realized significant abandonment due to drought, although at a lower level than in 2011. By contrast, Alabama, California, Georgia, North Carolina, South Carolina and Virginia recorded record yields in 2012. Higher U.S. and global cotton stocks have pushed prices downward. Cotton prices for 2012/13 are estimated at 68.50 cents per pound, down 22 percent from last year's season average farm price.

<u>Hay</u>. Hay production in 2012 is estimated at 120 million tons, down 8.6 percent from 2011 levels and the lowest yield since 1976. Yields were down across the country except in the South where moisture was more readily available when compared to 2011. Last year's December 1 hay stocks were at their lowest level since 1957.

<u>Specialty crops</u>. Drought resulted in fewer losses to specialty crop producers because either most specialty crops were in regions with adequate rainfall or they were irrigated. Subfreezing temperatures in early April 2012 were particularly damaging to trees in Michigan, New York, and Pennsylvania which had begun to flower due to unseasonably warm temperatures earlier in March. U.S. tart cherry production was forecast down relative to 2011 by 68 percent, with the majority of the loss occurring in Michigan. Wisconsin, New York and smaller producing states

also had severe losses due to the freeze. Sweet cherry production was up in 2012 nationally due to bumper crops in the Pacific Northwest, but was down by more than 80 percent in Michigan. Apple production was down significantly in Michigan, New York, North Carolina, Wisconsin, Ohio, and Indiana. As would be expected, other specialty crop losses resulted in crop insurance indemnities in 2012. Some examples include January 2012 and December 2012 freeze damage to berry and tree crops in California, Arizona, Texas, and Florida and April fruit tree damage in California.

Impacts on 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 4). 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 indicated that total cattle and calf numbers in Kansas, Oklahoma and Texas declined by 3.4 million head between 2011 and 2013. The reduction is a 13.6 percent decline and about equals the net decline in the U.S. herd over the same period. 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 has limited hog, poultry and dairy expansion. 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.

Impact of Farm Safety Net Programs on Producers

Several USDA agencies provided critical assistance to help crop and livestock producers offset the loss in farm revenue caused by the drought and other natural disasters. Crop insurance played a major role in helping many row crop producers offset crop losses. However, many producers either lacked adequate coverage or in the case of some specialty crops and livestock producers, insurance coverage was unavailable. To help address their concerns, the Department took a number of administrative actions to provide more flexible and timely assistance to farmers and ranchers hurt by natural disasters.

<u>Crop insurance</u>. Almost 282 million acres were enrolled in the Federal crop insurance program in 2012. Participation among most row crops has been high. Roughly 85 percent of corn, wheat and soybean area, almost 80 percent of rice area and over 90 percent of cotton area is typically enrolled in the program. This contrasts sharply with participation at the time of the 1988 drought (also a severe drought) when only 25 percent of insurable area was enrolled in the crop insurance program.

As of February 11, 2013, \$14.2 billion in indemnity payments had been made to producers of 2012 crops suffering crop or revenue losses. Corn indemnity payments totaled almost \$9.3 billion, with over 94 percent of these payments issued for revenue-based policies which indemnify producers at harvest prices (table 3). Soybean indemnities have totaled almost \$1.9 billion, almost 94 percent from revenue policies. Not surprising, most of the indemnities have been to producers in the Midwest though heavy losses are also evident in the Southern Plains (table 4 and figure 5).

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.

Other actions taken by the USDA to aid affected producers. USDA has a number of programs that help form a safety net for crop and livestock producers. For example, farmers that grow crops that are not currently covered by a crop insurance product can apply for a direct payment under the Noninsured Crop Disaster Assistance Program (NAP), which functions similarly to catastrophic crop insurance. NAP payments for 2011 crop losses totaled over \$260 million and to date have totaled almost \$100 million for losses to the 2012 crop.

Due to the severity of the drought conditions and widespread impacts on agricultural production, USDA took advantage of flexibilities afforded under its authorities to speed assistance to affected producers (table 5). For example, during the summer, USDA expanded the lands in the Wetland Reserve Program and the Conservation Reserve Program that would be eligible for emergency haying or grazing in order to help manage the extremely poor pasture conditions and high feed costs faced by livestock producers. Roughly 2.8 million acres in the Conservation Reserve Program were opened up under the emergency haying and grazing option, which provided up to \$200 million in forage value to livestock producers. In addition, funds were prioritized under the Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP) to help producers manage drought conditions. Modifications of existing contracts were allowed for grazing and livestock watering in drought stricken areas.

In addition, USDA Secretary Tom Vilsack last July announced several program improvements to deliver faster and more flexible assistance to farmers and ranchers devastated by natural disasters. Those actions included simplifying the process for Secretarial disaster designations, which resulted in a 40 percent reduction in processing time for most counties affected by disasters. In 2012, 2,333 counties received disaster designation status (2,254 due to drought); 704 counties have been designated as disaster counties in 2013 (703 due to drought). Other actions included a reduced interest rate for emergency loans and a payment reduction on Conservation Reserve Program (CRP) lands qualified for emergency haying and grazing in 2012, from 25 to 10 percent. The Secretary also worked with crop insurance companies to provide an extended payment period to pay crop insurance premiums and filed special provisions with the federal crop insurance program to allow haying or grazing of cover crops without affecting the insurability of planted 2013 spring crops.

Most recently, in December 2012, Secretary Vilsack announced that, in the wake of a series of regional drought conferences with farmers, ranchers, business owners and other stakeholders, a memorandum of understanding has been signed with the Department of Commerce, including the National Oceanic and Atmospheric Administration (NOAA), to improve sharing of data and expertise, monitoring networks, and drought forecasting efforts.

Despite the actions noted above and listed in Table 5, some programs that could have helped mitigate the impacts of the severe drought conditions had expired or currently have no funding, particularly for livestock producers (see table 6). In 2011, payments from those programs totaled more than \$500 million. Preliminary analysis suggests that in 2012, the Livestock Forage Program payments alone could have totaled between \$500 million and \$600 million, roughly double the 2011 levels.

Impacts of the Drought on 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.

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. 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 highest level in real terms since 1973 if realized. 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 6). 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 7). Feed costs 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.

The non-real estate debt forecast is principally driven by increases in working capital (current assets less current liabilities) and capital spending (mainly for machinery and equipment). During 2012, farmers have continued to invest substantially in equipment, structures, and land improvements. A survey of commercial banks by the Federal Reserve Bank of Kansas City conducted in November 2012 found that bank lending for feeder livestock and current operating expenses rose sharply compared to 2011. Non-real estate loan volumes for current operating expenses, including crop inputs and feed, doubled year-ago volumes, and loan volumes for feeder livestock remained well above 2011 levels.

Impacts on Food Prices

¹ Henderson, J. and M. Akers. "Farm Lending Soars at Commercial Banks." *Agricultural Finance Databook*. The Federal Reserve Bank of Kansas City. January 2013.

The Consumer Price Index (CPI) for food measures the changes in the retail prices of food items. The drought has affected commodity prices for corn and soybeans as well as other field crops which should, in turn, affect retail food prices. However, the transmission of commodity price changes into retail prices typically takes several months to occur. The 12-month percent change in retail food prices shows that food price inflation slowed through the second half of 2012, but that at the end of the year, that slowing had leveled off (figure 8). The BLS reports that all-food prices in December 2012 were 1.8 percent higher than levels in December 2011. 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.

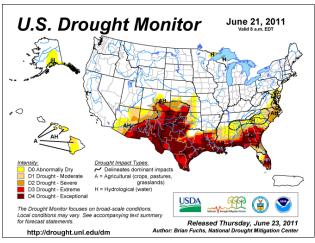
Moreover, the farm component of most food sales is relatively small—about 14 percent of the overall food dollar. So while prices for food and feed grain crops have increased substantially over the past few months, USDA forecasts that food prices will increase only between 3 to 4 percent in 2013, just slightly above the historical average of 3 percent (last 9 years). 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.

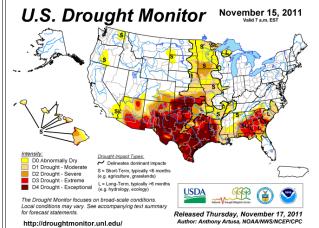
Conclusions

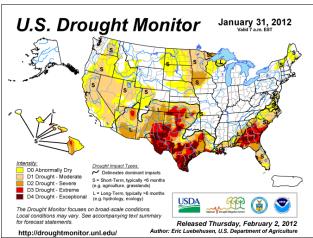
Major concerns related to persistent drought conditions remain: 59 percent of winter wheat areas; 69 percent of cattle production; and 59 percent of hay acreage remain under drought conditions. Forty-three percent of winter wheat production is located in areas under extreme or exceptional drought conditions, down only slightly from a higher of 51 percent in August (see figure 9). While that also implies that spring planting may be affected by drought conditions as well, there have been improvements in the eastern Corn Belt, where many areas are no longer experiencing drought. Assuming adequate precipitation, it is likely that the major spring planted row crops will see a return to trend yields. If so, a rebuilding of stocks and lower commodity prices would be expected in the fall.

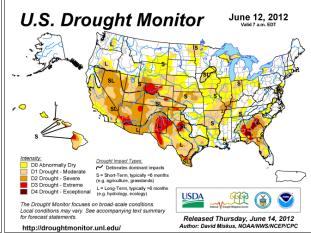
That concludes my testimony. I would be happy to answer any questions.

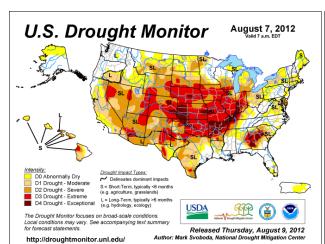
Figure 1—U.S. Drought Monitor (June 2011 – January 2013)











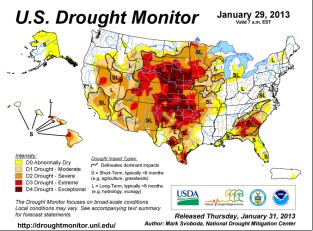


Table 1—Percent of selected 2012 crops rated in "Poor" or "Very Poor" condition

Week	Corn	Soybeans	Cotton	Peanuts	Rice	Sorghum	Spring	Winter	Pasture
ending							wheat	wheat	
6/3/2012	5	6	9	3	5	9	2	18	22
6/10/2012	8	10	13	1	4	12	4	17	27
6/17/2012	9	12	15	1	6	13	3	17	28
6/24/2012	14	15	16	2	5	15	4	17	34
7/1/2012	22	22	18	2	5	24	5		43
7/8/2012	30	27	18	2	8	29	7		50
7/15/2012	38	30	18	2	7	32	8		54
7/22/2012	45	35	18	4	6	40	11		55
7/29/2012	48	37	22	4	6	42	11		57
8/5/2012	50	39	27	5	7	45	11		59
8/12/2012	51	38	28	3	7	48	11		59
8/19/2012	51	37	30	3	6	51			59
8/26/2012	52	38	28	4	7	50			59
9/2/2012	52	37	28	2	7	50			59
9/9/2012	52	36	30	3	8	51			58
9/16/2012	50	36	30	3		51			56
9/23/2012	51	34	30	4		50			56
9/30/2012	50	33	31	3		50			55

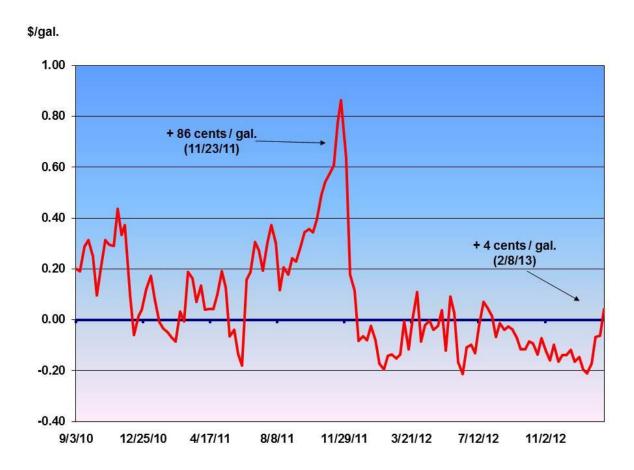
Table 2—Change in U.S. crop production and use estimates for selected crops, 2012 crop year

	Unit	USDA projection/ estimate as of:			Percent
Crop		5/10/2012	1/11/2013	Change	change
Corn					
Production	Mil bu	14,790	10,780	-4,010	-27.1%
Feed and residual	Mil bu	5,450	4,450	-1,000	-18.3%
Ethanol	Mil bu	5,000	4,500	-500	-10.0%
Exports	Mil bu	1,900	950	-950	-50.0%
Ending stocks	Mil bu	1,881	602	-1,279	-68.0%
Average price	\$/bu	4.60	7.40	2.80	60.9%
Soybeans					
Production	Mil bu	3,205	3,015	-190	-5.9%
Crush	Mil bu	1,655	1,605	-50	-3.0%
Exports	Mil bu	1,505	1,345	-160	-10.6%
Ending stocks	Mil bu	145	135	-10	-6.9%
Average price	\$/bu	13.00	14.25	1.25	9.6%
Sorghum					
Production	Mil bu	335	247	-88	-26.3%
Feed and residual	Mil bu	90	125	35	38.9%
Food, seed, industrial	Mil bu	90	60	-30	-33.3%
Exports	Mil bu	140	65	-75	-53.6%
Ending stocks	Mil bu	42	21	-21	-50.0%
Average price	\$/bu	4.25	7.30	3.05	71.8%
Wheat					
Production	Mil bu	2,245	2,269	24	1.1%
Food use	Mil bu	945	950	5	0.5%
Feed and residual	Mil bu	230	350	120	52.2%
Exports	Mil bu	1,150	1,050	-100	-8.7%
Ending stocks	Mil bu	735	716	-19	-2.6%
Average price	\$/bu	6.10	7.90	1.80	29.5%

 $\begin{tabular}{ll} Table 2-Change in crop production and use estimates for selected crops, 2012 crop year (continued) \end{tabular}$

	Unit	USDA projection/ estimate as of:			Percent
Crop		5/10/2012	1/11/2013	Change	change
Rice					
Production	Mil cwt	183.0	199.5	16.5	9.0%
Domestic	Mil cwt	123.0	125.0	2.0	1.6%
Exports	Mil cwt	89.0	106.0	17.0	19.1%
Ending stocks	Mil cwt	27.0	30.1	3.1	11.5%
Average price	\$/cwt	15.8	14.9	-0.9	-5.7%
Cotton					
Production	Mil bales	17.0	17.0	0.0	0.1%
Mill use	Mil bales	3.5	3.4	-0.1	-2.9%
Exports	Mil bales	12.0	12.2	0.2	1.7%
Ending stocks	Mil bales	4.9	4.8	-0.1	-2.0%
Average price	Cents/lb	75.0	68.5	-6.5	-8.7%

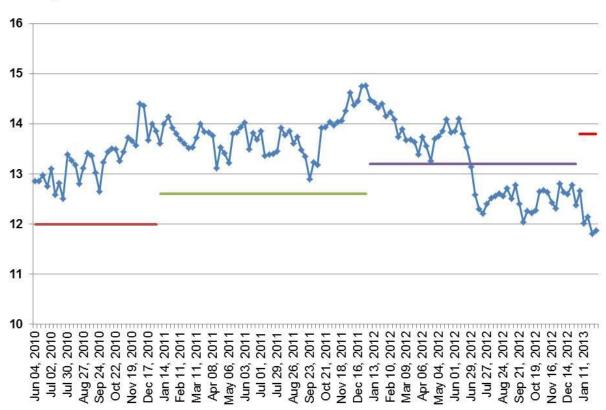
Figure 2--Ethanol producer net returns above variable costs



Source: Based on spot prices from USDA-AMS and forecasts for natural gas and electricity prices from EIA.

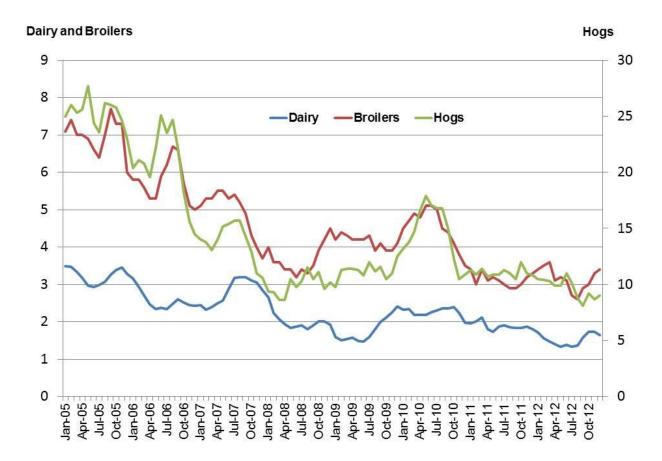
Figure 3--Weekly ethanol production (annualized)





Source: EIA.

Figure 4--Feed ratios (2005 – 2012)



Source: National Agricultural Statistics Service

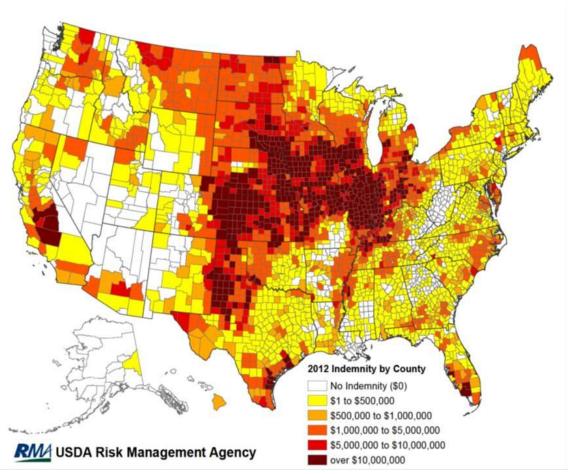


Figure 5—Indemnities for 2012 crops (as of 02/4/2013)

Source: available online at http://www.rma.usda.gov/data/indemnity/index.html.

Table 3—Summary of business for top 5 crops, 2012 crop year

Crop	Premium	Indemnity	Loss ratio
Corn	4,317.4	9,270.1	215%
Soybeans	2,345.3	1,853.4	79%
Upland cotton	834.0	1,026.7	123%
Wheat	1,781.9	727.3	41%
Grain sorghum	213.9	392.4	183%
Other	1,578.8	958.8	61%
Total	11,071.3	14,228.7	129%

Source: FCIC Summary of Business, February 11, 2013

Table 4—Summary of business for selected states, 2012 crop year

State	Premiums	Indemnities	Loss ratio
Illinois	771.5	2,344.4	304%
Iowa	901.7	1,725.2	191%
Nebraska	666.1	1,408.5	211%
Kansas	807.7	1,322.3	164%
Texas	1,079.2	1,318.4	122%
South Dakota	699.2	1,072.8	153%
Missouri	366.2	963.9	263%
Indiana	436.9	851.9	195%
Kentucky	144.2	380.0	264%
Wisconsin	269.0	356.8	133%
Ohio	325.6	318.7	98%
Colorado	217.5	253.7	117%
Minnesota	823.7	237.2	29%
North Dakota	955.0	227.7	24%
Oklahoma	252.7	203.7	81%
Other	2,355.1	1,243.5	53%
Total	11,071.3	14,228.7	129%

Source: FCIC Summary of Business, February 11, 2013

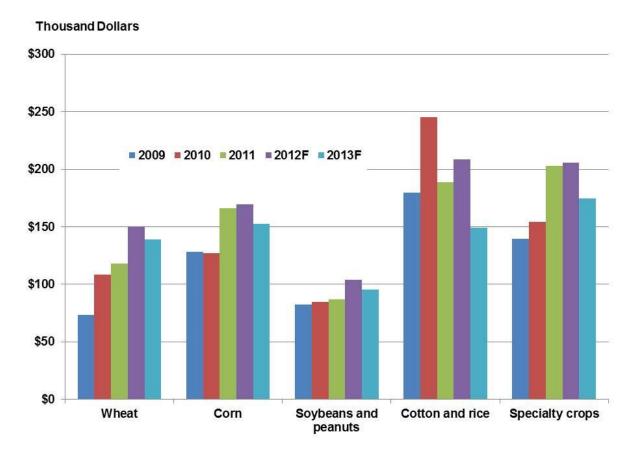
Table 5—Actions taken by USDA in response to the drought

Program	Action
Crop Insurance	Extended payment period to pay crop insurance premiums and allowed haying or grazing of cover crops without impacting the insurability of planted 2013 spring crops
Nutrition Assistance Programs	Purchased approximately \$170 million of pork, lamb, chicken, and catfish for federal food nutrition assistance programs, including food banks, to help relieve pressure on American livestock producers and bring the nation's meat supply in line with demand.
Conservation Reserve Program (CRP)	Opened haying and grazing on previously ineligible practices and suspended rental payment penalties for emergency grazing provisions on CRP acres. In total, roughly 2.8 million acres under 57,000 CRP contracts utilized the emergency haying and grazing option providing between \$140 million to \$200 million in forage value and needed flexibility in livestock feed supplies. The rental payment reduction on emergency hayed and grazed acres was reduced from 25 percent to 10 percent.
Wetland Reserve Program (WRP)	Authorized haying and grazing of WRP easement areas in drought- affected areas where haying and grazing is consistent with conservation of wildlife habitat and wetlands.
Emergency Conservation Program (ECP)	Transferred \$14 million in unobligated program funds into ECP to rehabilitate farmland damaged by natural disasters and for carrying out emergency water conservation measures in periods of severe drought.
Wildlife Habitat Incentives Program (WHIP) and Environmental Quality Incentives Program (EQIP)	Prioritized \$16 million from the WHIP and EQIP to target states experiencing exceptional and extreme drought. Allowed producers to modify current contracts to allow for grazing, livestock watering, and other conservation activities to address drought conditions.
Disaster Declaration: • 2,333 counties for CY2012 • 704 counties for CY2013	Simplified the Secretarial disaster designation process and reduced the time it takes to designate counties affected by disasters by 40 percent. Qualifies farm operators in the areas eligible for low-interest emergency loans. Updated the emergency loans application process to allow loans to be made earlier in the season, and reduced the emergency loan rate.
Conservation Innovation Grants	Authorized up to \$5 million in grants to evaluate and demonstrate agricultural practices that help farmers and ranchers adapt to drought.

Table 6—Expired and Unfunded Disaster Provisions under the 2008 Farm Act

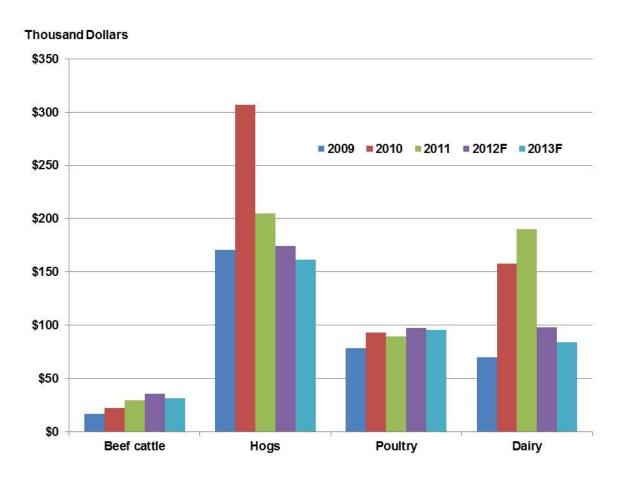
Program	Description
Livestock Forage Disaster	Provided compensation to eligible livestock producers that suffered
Assistance Program (LFP)	grazing losses for covered livestock on land that is native or
	improved pastureland with permanent vegetative cover or is planted
	specifically for grazing. The grazing losses must have occurred on
	or after Jan. 1, 2008, and before Oct. 1, 2011.
Livestock Indemnity	Provided benefits to livestock producers for livestock deaths in
Program (LIP)	excess of normal mortality caused by adverse weather that occurred
	on or after Jan. 1, 2008, and before Oct. 1, 2011, including losses
	because of hurricanes, floods, blizzards, disease, wildfires, extreme
	heat, and extreme cold. The livestock death losses must also have
	occurred in the calendar year for which benefits are being requested.
Emergency Assistance for	Provided emergency relief to producers of livestock, honey bees,
Livestock, Honeybees,	and farm-raised fish. Covered losses from disaster such as adverse
and Farm-Raised Catfish	weather or other conditions, such as blizzards and wildfires not
(ELAP)	adequately covered by any other disaster program occuring before
	Oct. 1. 2011.
Tree Assistance Program	Provided financial assistance to qualifying orchardists and nursery
(TAP)	tree growers to replant or rehabilitate eligible trees, bushes and
	vines damaged by natural disasters occurring on or after Jan. 1,
	2008, and before Oct. 1, 2011
Supplemental Revenue	Expired: provided assistance to producers suffering crop losses due
Assistance Payments	to natural disasters occurring through Sept. 30, 2011.
(SURE)	

Figure 6--Net cash income for farm businesses that specialize in crop production



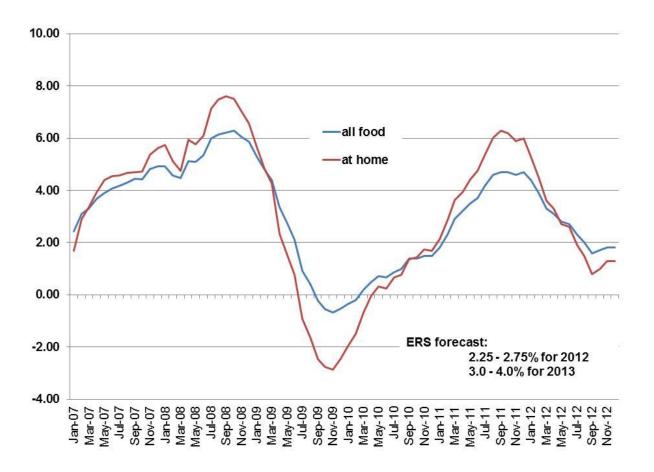
 $Source: USDA\ Economic\ Research\ Service\ (http://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances.aspx)$

Figure 7--Net cash income for farm operations that specialize in livestock production



 $Source: USDA\ Economic\ Research\ Service\ (http://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances.aspx)$

Figure 8--Food CPI (2007 – 2013)



Source: BLS.

■ Exceptional Drought (D4) Extreme Drought (D3) Severe Drought (D2) ■ Moderate drought (D1) Corn Winter wheat Cotton Soybeans Hay Cattle Agricultural Weather Assessments World Agricultural Outlook Board USDA

Figure 9--Percent of crop production in drought (as of January 29, 2013)

Source: USDA Joint Agricultural Weather Facility.