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Understanding the New Farm Income Safety Net

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**Understanding the New Farm Income Safety Net**

The new farm bill recently enacted by Congress includes some major changes in the farm income safety net that will affect producer sign-up and risk management decisions over the 2008-2012 life of the bill. With current commodity prices at levels high above the existing price-based farm income safety net, many producers have assumed the impact of the farm program will be minimal for the life of the new bill. However, the changes in the new farm bill, particularly the inclusion of two new revenue-based programs, demand a much closer look on the part of producers.

**Existing Price-Based Safety Net:** At first, the new commodity program will look a lot like the old commodity program. Recall that the three parts of the safety net provide support in three different methods:

- **Marketing Loan Gain or Loan Deficiency Payment = Loan Rate - Posted County Price**

- **Direct Payment Rate = Fixed Rate Established by Legislation**

- **Counter-Cyclical Payment Rate = Target Price - Direct Payment Rate - Max(Loan Rate, Market Price)**

Marketing loan benefits are paid on actual production. Direct payments are paid at a fixed rate and a fixed direct payment yield on 85 percent (83.3 percent during the years 2009-2011) of the farm’s base acres. Counter-cyclical payments complete the safety net, and are made only when the national average market price falls below a trigger price equal to the target price less the direct payment rate. They are paid on the farm’s counter-cyclical payment yield and 85 percent (83.3 percent during the years 2009-2011) of the farm’s base acres.

For the remainder of the 2008 crop year, the existing three-part safety net of marketing loans, counter-cyclical payments and direct payments remains in place at existing rates from 2007. For later years, the target prices and/or the loan rates for many commodities increase, including wheat, sorghum, barley, oats, soybeans and other oilseeds. While these increases in loan rates and target prices prop up the existing safety net, the rates will remain far below current price levels. Only the direct payment program is on track to make substantial payments to producers over the life of this farm bill.
New Revenue-Based Safety Net: The big change in the commodity program is a new optional program called the Average Crop Revenue Election (ACRE) Program. ACRE will be available as an irrevocable option for producers beginning in the 2009 crop year, as a replacement to the existing counter-cyclical payment program. In ACRE, the protection is tied to revenue instead of price and is based on the actual estimate of state crop revenue relative to a state-level guarantee:

\[
\text{Benchmark State Yield} = \text{5-Year Olympic Average State Yield per Planted Acre}
\]
\[
\text{Benchmark Price} = \text{2-Year National Average Market Price}
\]
\[
\text{State Guarantee} = (90\% \times \text{Benchmark State Yield} \times \text{Benchmark Price}) \text{ limited to no more than 10\% change from previous year's state guarantee}
\]
\[
\text{Benchmark Farm Yield} = \text{5-Year Olympic Average Farm Yield per Planted Acre}
\]
\[
\text{Benchmark Farm Revenue} = (\text{Benchmark Farm Yield} \times \text{Benchmark Price}) + \text{Crop Insurance Premiums Paid}
\]
\[
\text{Actual State Revenue} = \text{Actual State Yield per Planted Acre} \times \text{Benchmark Price}
\]
\[
\text{Actual Farm Revenue} = \text{Actual Farm Yield per Planted Acre} \times \text{Benchmark Price}
\]

An ACRE payment for a producer is triggered only if the actual state revenue falls below the state guarantee, and the producer’s actual farm revenue falls below the producer’s benchmark farm revenue. The resulting ACRE payment rate is:

\[
\text{ACRE Payment Rate} = \text{Min}[(\text{State Guarantee} - \text{Actual State Revenue}) \times (25\% \times \text{State Guarantee}) \times (\text{Benchmark State Yield/Benchmark Farm Yield})]
\]

The ACRE payment is paid on 85 percent (83.3 percent for 2009-2011) of the farm’s planted acres of each program crop instead of base acres, as with the counter-cyclical payment. However, the total acres on the farm eligible for an ACRE payment are limited to no more than the farm’s existing base acres.

By virtue of the moving average yield and price, the ACRE program will more closely track the recent movement up in price levels and will protect revenue at a much higher effective rate than the existing price-based safety net. For example, the 2009 ACRE guarantee for corn in Nebraska could be based on a national average corn price of $4.88 per bushel if current United States Department of Agriculture (USDA) price forecasts prove accurate. Thus, the 90-percent guarantee could be $4.39 per bushel, not counting the effect of yield variation. This guarantee compares very favorably to the current price counter-cyclical payment for corn, which would not kick in until the corn price fell below $2.35 per bushel. Even if commodity prices fall dramatically in the coming years, the ten percent annual limit on changes in the guarantee means the effective price guarantee can not fall as far as the level of the existing safety net over the life of the farm bill, even after allowing for expected increases in average yield levels.

However, there are also some limitations in the protection that ACRE can provide. First, the ACRE payment is limited to no more than 25 percent of the guarantee, meaning it cannot protect all of a fall in crop revenue due to price and/or yield losses.

Second, the ACRE payment is based on shortfalls in state-level crop revenue and not farm-level crop revenue, so it does not directly protect the farm’s crop revenue risk. Third, it is paid on just 83.3 or 85 percent of the planted acres, the same as the price counter-cyclical payment. Finally, and perhaps most significantly, producers choosing ACRE must also take a 20 percent cut in the direct payment and a 30 percent cut in marketing loan rates.

New Permanent Disaster Assistance: In addition to the changes in commodity program language, another section of the new farm bill creates a permanent agricultural disaster assistance program for crop revenue losses, livestock losses, livestock feed losses and other needs beginning immediately in 2008. The crop disaster program is named the Supplemental Revenue Assistance Program (called the SURE Program). It provides assistance to producers for crop revenue losses at a whole-farm level of protection. To participate in the SURE program, a producer must purchase crop insurance on all non-insurable crops on the farm, and Non-Insured Assistance Program (NAP) coverage on all non-insurable crops (there is a special provision to cover the 2008 crop year, given the legislation was passed after the crop insurance deadline). Then the producer’s farm must be in a disaster county or the farm must suffer production losses greater than 50 percent to be eligible for a SURE payment.

The SURE guarantee is calculated across all crops as a percentage above the crop insurance or NAP protection purchased, limited to an individual crop cap of no more than 90 percent of the expected revenue for the crop. The complex set of calculations used to determine any SURE assistance is:

\[
\text{SURE Insured Crop Guarantee} = \text{Min}[(115\% \times \text{Insurance Price Election} \times \text{Crop Acres} \times \text{Percentage Insurance Yield Election} \times \text{Max(Adjusted APH, Counter-Cyclical Payment Yield)}) \times (90\% \times 100\% \times \text{Insurance Price Guarantee} \times \text{Crop Acres} \times \text{Max(Adjusted APH, Counter-Cyclical Payment Yield)})]
\]
\[
\text{SURE Non-Insurable Crop Guarantee} = \text{Min}[(120\% \times \text{NAP Price} \times \text{Crop Acres} \times \text{Max(NAP Yield Guarantee, Counter-Cyclical Payment Yield)}) \times (90\% \times \text{NAP Price} \times \text{Crop Acres} \times 100\% \text{NAP Yield})]
\]
\[
\text{SURE Guarantee} = \text{Sum Across All Crops(SURE Insured Crop Guarantee + SURE Non-Insurable Crop Guarantee)}
\]
\[
\text{Farm Revenue} = \text{Sum Across All Crops ((Harvested Acres} \times \text{Yield per Harvested Acre} \times \text{National Average Market Price}) + (15\% \times \text{Direct Payments}) + \text{Counter-Cyclical Payments + ACRE Payments + Loan Benefits + Crop Insurance Indemnities + NAP Payments + Other Disaster Payments)
\]
\[
\text{SURE Payment Rate} = 60\% \times (\text{SURE Guarantee} - \text{Farm Revenue})
\]

The changes to the existing price-based safety net, the new revenue-based ACRE program, and the new SURE assistance program add up to a more complex farm income safety net. The risk management decision for producers was already becoming more challenging with greater costs for crop insurance premiums and more concerns about hedging in the futures, options and cash markets. Add the changing farm income safety net to the mix and the risk management decision has just become even more complex. Analyzing the new programs carefully and understanding how they complement or substitute for insurance and marketing decisions on the farm will be critical to the farm’s
success in the coming years. A new farm bill website is being created at [www.agecon.unl.edu/farmbill](http://www.agecon.unl.edu/farmbill) to provide program information, analysis and resources to help producers with the complex decisions ahead.

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Table 1. Existing (2007) and New (2008-2012) Commodity Program Parameters

<table>
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<th>Loan Rates</th>
<th>Direct Payment Rates</th>
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<tr>
<td>Wheat (bu)</td>
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<td>Grain Sorghum (bu)</td>
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<td>Oats (bu)</td>
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<td>Upland Cotton (lb)</td>
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<td>Long Grain Rice (cwt)</td>
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<td>Medium Grain Rice (cwt)</td>
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<td>Soybeans (bu)</td>
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<td>Other Oilseeds (cwt)</td>
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<td>Peanuts (ton)</td>
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<td>Large Chickpeas (cwt)</td>
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