



# Federal Crop Insurance: Background and Issues

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## Summary

The 111<sup>th</sup> Congress is considering the effectiveness of the federal crop insurance program, initially with the House Committee on Agriculture seeking input from farmers in April 2009. Meanwhile, concern about the federal budget deficit is coinciding with the rising cost of federal crop insurance program. This report provides a primer on the federal crop insurance program and discusses related issues.

The federal crop insurance program began in 1938 when Congress authorized the Federal Crop Insurance Corporation. The current program, which is administered by the U.S. Department of Agriculture's Risk Management Agency (RMA), provides producers with risk management tools to address crop yield and/or revenue losses on their farms. In purchasing a policy, a producer growing an insurable crop selects a level of coverage and pays a portion of the premium—or none of it in the case of catastrophic coverage—which increases as the level of coverage rises. The federal government pays the rest of the premium (averaging nearly 60% of the total).

Insurance policies are sold and completely serviced through 16 approved private insurance companies. The insurance companies' losses are reinsured by USDA, and their administrative and operating costs are reimbursed by the federal government.

In 2008, federal crop insurance policies covered 272 million acres. Major crops are covered in most counties where they are grown. In 2008, four crops—corn, cotton, soybeans, and wheat—accounted for more than two-thirds of total acres enrolled in crop insurance.

Most crop insurance policies are either yield-based or revenue-based. For yield-based policies, a producer can receive an indemnity if there is a yield loss relative to the farmer's "normal" (historical) yield. Revenue-based policies protect against crop revenue loss resulting from declines in yield, price, or both. The most recent addition has been insurance products that protect against losses in whole farm revenue rather than just for an individual crop.

Government costs for crop insurance have increased substantially in recent years. After ranging between \$2.1 and \$3.6 billion during FY2000-FY2006, costs rose to \$3.9 billion in FY2007 and \$5.7 billion in FY2008 as higher policy premiums from rising crop prices drove up premium subsidies to farmers and expense reimbursements (which are based on total premiums) to private insurance companies. Reimbursements and risk-sharing between USDA and private insurance companies are spelled out in a Standard Reinsurance Agreement (SRA), which plays a large role in determining program costs. The 2008 farm bill (P.L. 110-246) allows USDA to renegotiate the SRA once every five years starting with the 2011 reinsurance year (which begins July 1, 2010).

Given concerns about the federal deficit, reductions in funding for crop insurance have been included in the Administration's budget proposal. Insurance companies and farm groups are concerned that significant reductions in federal support will negatively impact the financial health of the crop insurance industry and possibly jeopardize the delivery of crop insurance. The crop insurance industry argues that cuts to the program were already made in the 2008 farm bill, and additional cuts would be unfair. Others point to recent increases in operating expense reimbursements and underwriting gains, questioning whether these higher levels are necessary for maintaining a viable crop insurance industry. A main concern for most would likely be saving federal dollars without adversely affecting farmer participation, policy coverage, or industry interest in selling and servicing crop insurance products to farmers.

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## Crop Insurance History

Farming is generally regarded as a financially risky enterprise. Most agricultural production is subject to the vagaries of weather, and the nature of agricultural supply and demand often results in volatile market prices. Farm financial risk, periods of low returns, and the importance of agriculture in the nation's economy during the early to mid-1900s led to the development of federal policies that financially supported farmers, primarily through commodity price mechanisms. Today's farm commodity policies—authorized in the 2008 farm bill—have their roots in the 1930s.<sup>1</sup>

During the same era, Congress also first authorized federal crop insurance as an experiment to address the effects of the Great Depression and crop losses seen in the Dust Bowl. In 1938, the Federal Crop Insurance Corporation (FCIC) was created to carry out the program, which focused on major crops in major producing regions. The federal crop insurance program remained limited until passage of the Federal Crop Insurance Act of 1980 (P.L. 96-365), which expanded crop insurance to many more crops and regions of the country. Congress enhanced the crop insurance program in 1994 and again in 2000 in order to encourage greater participation. The changes also expanded the role of the private sector in developing new products that would help farmers manage their risks.<sup>2</sup>

The federal crop insurance program is permanently authorized by the Federal Crop Insurance Act, as amended (7 U.S.C. 1501 et seq.). It is periodically modified, most recently in the 2008 farm bill (P.L. 110-246). Congress chose to revise the legislation in the 2008 farm bill to achieve budget savings and to supplement crop insurance with a permanent disaster payment program.<sup>3</sup> The U.S. Department of Agriculture's (USDA's) Risk Management Agency (RMA) operates and manages the FCIC.

## Program Basics

The federal crop insurance program provides producers with risk management tools to address crop yield and/or revenue losses on their farms.<sup>4</sup> Insurance policies are sold and completely

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<sup>1</sup> For details on farm programs, see CRS Report RL34594, *Farm Commodity Programs in the 2008 Farm Bill*, by Jim Monke.

<sup>2</sup> For more on the history of federal crop insurance, see <http://www.rma.usda.gov/aboutrma/what/history.html>. Law citations are the Federal Crop Insurance Act of 1980 (P.L. 96-365), the Federal Crop Insurance Reform Act of 1994 (P.L. 103-354), and the Agriculture Risk Protection Act (ARPA) of 2000 (P.L. 106-224).

<sup>3</sup> For more information, see CRS Report RL34207, *Crop Insurance and Disaster Assistance in the 2008 Farm Bill*, by Ralph M. Chite and Randy Schnepf; and CRS Report R40452, *A Whole-Farm Crop Disaster Program: Supplemental Revenue Assistance (SURE)*, by Dennis A. Shields.

<sup>4</sup> Portions of this section are from CRS Report RL30739, *Federal Crop Insurance and the Agriculture Risk Protection* (continued...)

serviced through 16 approved private insurance companies. Independent insurance agents are paid sales commissions by the companies. The insurance companies' losses are reinsured by USDA, and their administrative and operating costs are reimbursed by the federal government (see "Federal Program Costs," below).

In purchasing a policy, a producer growing an insurable crop selects a level of coverage and pays a portion of the premium, which increases as the level of coverage rises. The remainder of the premium is covered by the federal government (nearly 60% of total premium, on average, is paid by the government). In the case of catastrophic coverage, the government pays the full premium. In the absence of subsidies, farmer participation in the crop insurance program would be substantially lower.

In 2008, crop insurance policies covered 272 million acres (**Figure 1**). Major crops are covered in most counties where they are grown. Four crops—corn, cotton, soybeans, and wheat—accounted for more than two-thirds of total enrolled acres. For these major crops, a large share of plantings is covered by crop insurance: corn at 81% of plantings; cotton, 95%; soybeans, 81%; and wheat, 77%.

Policies for less widely produced crops are available in primary growing areas. Examples include dry peas, blueberries, citrus, and walnuts. In total, policies are available for more than 100 crops (including coverage on a variety of fruit trees, nursery crops, pasture, rangeland, and forage).<sup>5</sup>

Crop insurance is not necessarily limited to crops; livestock coverage has recently become available. Relatively new or pilot programs protect livestock and dairy producers from loss of gross margin or price declines.

The availability of crop insurance for a particular crop in a particular region is an administrative decision made by USDA. The decision is made on a crop-by-crop and county-by-county basis, based on farmer demand for coverage and the level of risk associated with the crop in the region, among other factors. In areas where a policy is not available, farmers may request that RMA expand the program to their county. The process usually starts with a pilot program in order for RMA to gain experience and test the program components before it becomes more widely available.

Current law requires that RMA strive for actuarial soundness for the entire federal crop insurance program (that is, indemnities paid out should equal total premiums, including premium subsidies).<sup>6</sup>

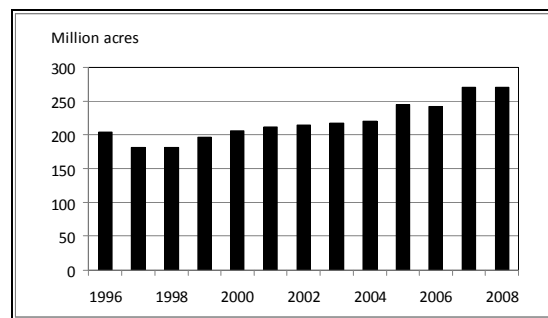
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*Act of 2000 (P.L. 106-224)*, by Ralph M. Chite.

<sup>5</sup> A complete list of crops is available at <http://www.rma.usda.gov/policies/08croplist.html>.

<sup>6</sup> U.S. Department of Agriculture, Risk Management Agency, <http://www.rma.usda.gov/help/faq/basics.html>.

**Figure 1. Insured Acres**



**Source:** U.S. Department of Agriculture, Risk Management Agency

## Types of Insurance

Federal crop insurance policies are generally either yield-based or revenue-based. For most yield-based policies, a producer can receive an indemnity if there is a yield loss relative to the farmer's "normal" (historical) yield. Revenue-based policies were developed in the mid-1990s to protect against crop revenue loss resulting from declines in yield, price, or both. The most recent addition has been products that protect against losses in whole farm revenue rather than just for an individual crop. These two basic forms—yield-based and revenue-based—are discussed below. The text boxes below entitled "Crop Insurance Examples: Yield-Based vs. Revenue-Based" (page 4) and "Federal Crop Insurance: Range of Coverage and Policies" (page 5) explain program operation within these two broad categories.

Nearly 2 million crop insurance policies were sold in 2008, with yield-based policies accounting for 47% of the total (**Figure 2**), and the remainder being revenue-based policies.

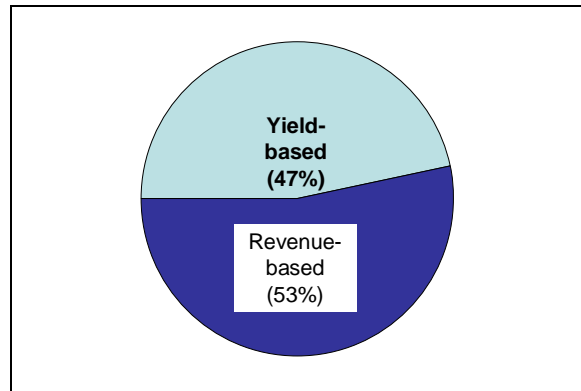
### Yield-Based Insurance

When purchasing a crop insurance policy, a producer is assigned (1) a "normal" crop yield based on the producer's actual production history, and (2) a price for his commodity based on estimated market conditions. The producer can then select a percentage of his normal yield to be insured and a percentage of the price he wishes to receive when crop losses exceed the selected loss threshold. The level of crop yield coverage is viewed by farmers as a critical feature of crop insurance, and a major determinant of whether a farmer will purchase insurance.<sup>7</sup>

In determining what a normal production level is for an insurable farmer, USDA requires the producer to present actual annual crop yields (usually stated on a bushel-per-acre basis) for the last 4 to 10 years. The simple average of a producer's annual crop yield over this time period then serves as the producer's actual production history (APH). If a farmer does not have adequate records, he can be assigned a transition yield (T-yield) for each missing year of data, which is based on average county yields for the crop.

The most basic policy is called catastrophic (CAT) coverage. The premium for this level of coverage is completely subsidized by the federal government. The farmer pays an administrative fee for CAT coverage (\$300 per crop per county under the 2008 farm bill, up from \$100

**Figure 2. Types of Crop Insurance Policies**  
(total policies sold in 2008 = 1.96 million)



**Source:** U.S. Department of Agriculture, Risk Management Agency.

<sup>7</sup> A number of university and Extension Service offices provide information to farmers when making crop insurance decisions. Some examples include [http://www.agmanager.info/crops/insurance/risk\\_mgt/default.asp](http://www.agmanager.info/crops/insurance/risk_mgt/default.asp), <http://www.ag.ndsu.nodak.edu/aginfo/cropmkt/cic.htm>, <http://www.farmdoc.uiuc.edu/cropins/index.asp>, and <http://www.umaine.edu/umext/cropinsurance/>.

previously), and in return can receive a payment on losses in excess of 50% of normal yield, equal to 55% of the estimated market price of the crop (called 50/55 coverage).

Coverage levels that are higher than CAT are called “buy-up” or “additional” coverage.<sup>8</sup> For an additional premium paid by the producer, and partially subsidized by the government, a producer can “buy up” the 50/55 catastrophic coverage to any equivalent level of coverage between 50/100 and 75/100 (i.e., up to 75% of “normal” crop yield and 100% of the estimated market price). In limited areas, production can be insured up to the 85/100 level of coverage.

**Crop Insurance Examples: Yield-Based vs. Revenue-Based**

Two basic forms of crop insurance are yield-based and revenue-based. Yield-based insurance provides an indemnity when the actual yield falls below the guarantee level. Revenue-based insurance provides an indemnity when the revenue (actual yield x price) falls below the guarantee.

**Actual Production History (APH) Example:**

A loss occurs when the bushels of soybeans produced for the insurance unit (insurable acreage) fall below the production guarantee as a result of damage from a covered cause of loss. Assumptions: “normal” production = 48 bushels / acre; yield coverage level = 75%; established price coverage = 100%; price election = \$9.90 / bushel; actual production = 20 bushels per acre.

48	bushels per acre APH yield
x .75	coverage level
36.0	bushel / acre guarantee
- 20.0	bushels / acre actually produced
16.0	bushels / acre of covered loss
x \$9.90	per-bushel price election
\$158.40	per-acre gross indemnity payment
- \$6.00	estimated producer-paid premium per acre (varies)
<b>\$152.40</b>	<b>per-acre net indemnity</b>

**Revenue Product Example:**

36.0	bushels / acre guarantee (see prior example)
x \$11.00	per-bushel base price (announced in March)
\$396.00	per-acre guarantee
20	bushels / acre actually produced
x \$10.00	per-bushel harvest price (announced in November)
\$200.00	per-acre revenue
\$196.00	per-acre gross indemnity payment (\$396.00 - \$200.00)
- \$13.00	estimated producer-paid premium (varies)
<b>\$183.00</b>	<b>per-acre net indemnity</b>

**Source:** U.S. Department of Agriculture, Risk Management Agency, 2009 Commodity Insurance Fact Sheet - Soybeans - Iowa, January 2009, [http://www.rma.usda.gov/fields/mn\\_rso/2009/2009iasoybeans.pdf](http://www.rma.usda.gov/fields/mn_rso/2009/2009iasoybeans.pdf).

<sup>8</sup> Participation at the CAT level has steadily decreased, particularly since subsidies on buy-up levels were increased in the Agriculture Risk Protection Act (ARPA) of 2000. In 2008, only about 11% of insured acres were insured at the CAT level.

## Federal Crop Insurance: Range of Coverage and Policies

**I. Catastrophic Coverage (CAT)** pays 55% of the established price of the commodity on crop losses in excess of 50%. The premium on CAT coverage is paid by the federal government; however, producers must pay a \$300 administrative fee (as of the 2008 farm bill, up from \$100) for each crop insured in each county. Limited-resource farmers may have this fee waived. CAT coverage is not available on all types of policies.

### II. Buy-up Coverage (any coverage level higher than CAT)

#### Yield-based policies:

**Actual Production History (APH)** policies insure producers against yield losses due to natural causes such as drought, excessive moisture, hail, wind, frost, insects, and disease. The farmer selects the amount of average yield he or she wishes to insure; from 50% to 85%. The farmer also selects the percentage of the projected price he or she wants to insure; between 55% and 100% of the crop price established annually by RMA. If the harvest is less than the yield insured, the farmer is paid an indemnity based on the difference. Indemnities are calculated by multiplying this difference by the insured percentage of the established price selected when crop insurance was purchased.

**Group Risk Plan (GRP)** insures against widespread loss of production based on county average yields. When the county yield for the insured crop, as determined by the National Agricultural Statistics Service (NASS), falls below the trigger level chosen by the farmer, an indemnity is paid regardless of the individual farmer's actual yield. Yield levels are available for up to 90% of the expected county yield. GRP protection involves less paperwork and costs less than the farm-level coverage described above. However, individual crop losses may not be covered if the county yield does not suffer a similar level of loss. This insurance is most often selected by farmers whose crop losses typically follow the county pattern.

**Dollar Plan** provides protection against declining value due to damage that causes a yield shortfall. (Crop examples include cherries, chili peppers, and citrus.) Amount of insurance is based on the cost of growing a crop in a specific area. A loss occurs when the annual crop value is less than the amount of insurance. The maximum dollar amount of insurance is stated on the actuarial document. The insured may select a percentage of the maximum dollar amount equal to CAT (catastrophic level of coverage), or additional coverage levels.

The **Vegetation Index** and **Rainfall Index** do not measure direct production or loss; rather the farmer is insuring against a rainfall or vegetation index that is expected to estimate production. The Pasture, Rangeland, and Forage (PRF) pilot program and the Apiculture pilot program (for beekeepers) use each index for different parts of the country.

#### Revenue-based policies:

**Crop Revenue Coverage (CRC)** provides revenue protection based on price and yield expectations by paying for losses below the guarantee at the higher of an early-season price or the harvest price. CRC is similar to RA (below) except that CRC uses an earlier period for its harvest price (October instead of November), and CRC limits how much the harvest price can vary from its base price (generated before planting time) while RA does not.

**Revenue Assurance (RA)** provides dollar-denominated coverage by the producer selecting a dollar amount of target revenue from a range defined by 65%-75% of expected revenue.

**Income Protection (IP)** protects producers against reductions in gross income when either a crop's price or its yield declines from early-season expectations. IP is similar to CRC and RA (with fall harvest price option) except that it does not use a harvest price as part of the guarantee.

**Group Risk Income Protection (GRIP)** makes indemnity payments only when the average county revenue for the insured crop falls below the revenue chosen by the farmer.

**Adjusted Gross Revenue (AGR)** insures revenue of the entire farm rather than an individual crop by guaranteeing a percentage of average gross farm revenue, including a small amount of livestock revenue. The plan uses information from a producer's Schedule F tax forms, and current-year expected farm revenue, to calculate the policy revenue guarantee.

**Source:** USDA's Risk Management Agency, <http://www.rma.usda.gov/policies/>.

The producer's premium increases as the levels of insurable yield and price coverage rise, and the premium on buy-up coverage is subsidized by the government at amounts ranging from 38% to 67%, depending upon the coverage level (**Table 1**). While the subsidy rate declines as the coverage level rises, the total premium subsidy in dollars increases because the policies are more expensive.

**Table 1. Crop Insurance Premium Subsidies on Yield- and Revenue-Based Coverage**  
(government-paid portion of premium as a percent of total premium, 2009 crops)

Yield coverage level (%)	CAT	50	55	60	65	70	75	80	85
Premium subsidy (%)	100	67	64	64	59	59	55	48	38

**Source:** USDA, Risk Management Agency (<http://www.rma.usda.gov/data/premium.html>).

**Notes:** Schedule applies to all plans of insurance except for Group Risk Plan, Group Risk Income Protection, and livestock (separate schedules apply).

APH policies account for more than 90% of yield-based policies sold. The remaining policies, including the Group Risk Plan and Dollar Plan (see box on page 5), are not widely used but can be important for certain crops. Some of these policies use an area-wide index—county-level yield in the case of the Group Risk Plan—to measure losses.

## Revenue-Based Insurance

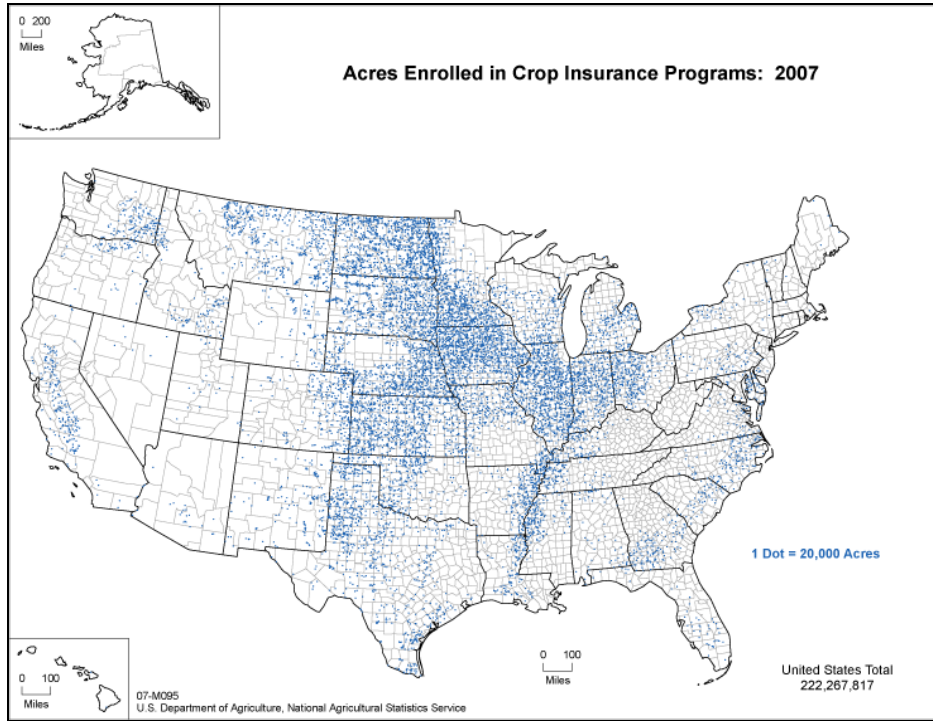
Revenue insurance is another major type of crop insurance, accounting for just over one-half of all crop insurance policies. It began in 1997 as a buy-up option on a pilot basis for major crops. By 2003, acreage under revenue-based insurance exceeded acreage covered by APH policies. Revenue insurance combines the production guarantee component of crop insurance with a price guarantee to create a target revenue guarantee.

Under revenue insurance programs, participating producers are assigned a target level of revenue based on market prices for the commodity and the producer's production history. A farmer who opts for revenue insurance can receive an indemnity payment when his actual farm revenue (crop-specific or entire farm, depending on the policy) falls below a certain percentage of the target level of revenue, regardless of whether the shortfall is caused by low prices or low production levels. The two most popular revenue plans are Revenue Assurance and Crop Revenue Coverage, which together account for slightly more than one-half of all yield- and revenue-based policies sold (**Figure 2**).

## Geographic Distribution of Indemnities

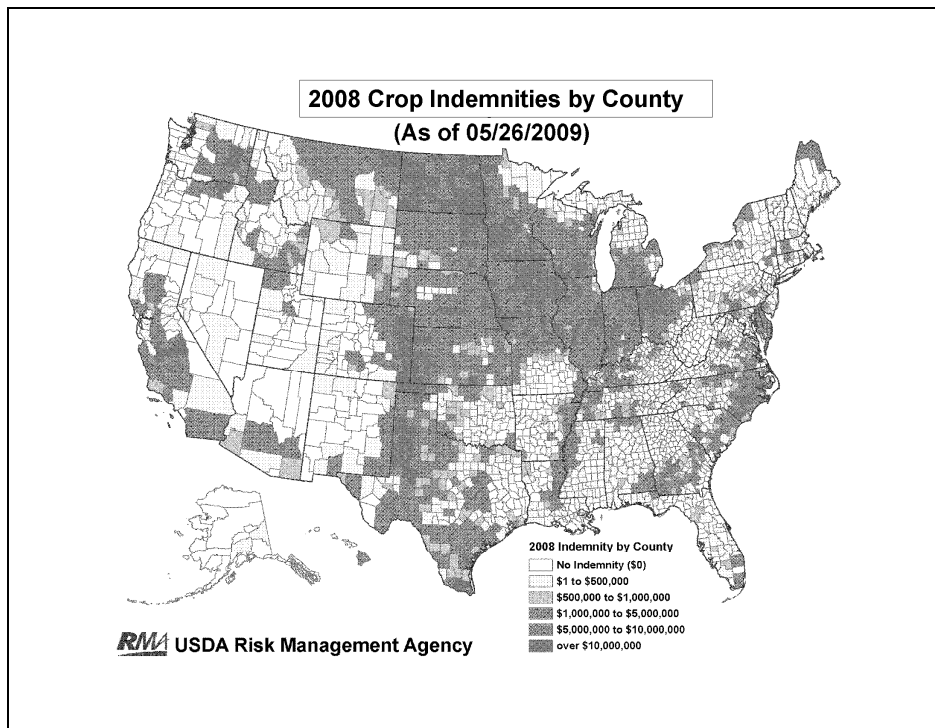
With widespread use of crop insurance products for major crops (corn, cotton, soybeans, and wheat), the geographic distribution of acreage enrolled in crop insurance mirrors that of major producing areas (**Figure 3**). Crop insurance indemnities follow the same pattern, but with an emphasis in producing areas with less rainfall and more variable crop-weather conditions. For example, **Figure 4** shows crop insurance indemnities for 2008. Relatively high indemnities were paid in the western Great Plains, a region with low and variable rainfall, and in the Corn Belt, where corn and soybean revenue losses occurred. Other years are similar, especially with respect to payments across the Great Plains. However, the concentration of payments shifts within major producing areas, primarily depending upon the prevalence of local weather problems.

Figure 3. Acres Enrolled in Crop Insurance, 2007



Source: USDA, National Agricultural Statistics Service, 2007 Census of Agriculture.

Figure 4. Crop Insurance Indemnities



Source: USDA, Risk Management Agency, <http://www.rma.usda.gov/data/indemnity/>.

## Intersection with Other Government Programs

The intersection between crop insurance and other government programs varies by commodity. For “program crops” such as wheat, corn, and soybeans, eligible producers receive government payments from several programs. These include the direct/counter-cyclical payment program (with fixed payment rates/price-dependent rates, respectively), the average crop revenue election (ACRE) program (revenue-dependent), and the marketing assistance loan program (price-dependent).<sup>9</sup> These programs have elements of risk reduction (i.e., reducing the variability of farm income or the “effective” farm price of a commodity). They also enhance farm income for participating producers. Compared with these national farm programs, with the exception of the ACRE program and its state yield component, crop insurance provides a more exact (i.e., location-specific) benefit to farmers trying to manage price and income risk. For crops not receiving payments under federal commodity programs, crop insurance serves as a primary risk management tool for farmers, particularly with respect to losses in yields.<sup>10</sup>

Crop insurance and other government programs for farmers are also linked via disaster programs. The Supplemental Revenue Assistance Program (SURE) requires the purchase of crop insurance for program eligibility.<sup>11</sup> Generally, ad-hoc disaster bills in the past (except the most recent one) have not required crop insurance for eligibility, although most required future crop insurance purchases (or participation in the noninsured assistance program) and/or linked payment rates to crop insurance participation. For participation in commodity programs listed above, there is no crop insurance requirement.

When crop insurance is not available, USDA’s noninsured crop disaster assistance program (NAP) provides coverage. To be eligible for a NAP payment, a producer first must apply for coverage under the program by the application closing date, which varies by crop, but is generally about 30 days prior to the final planting date for an annual crop. Like catastrophic crop insurance, NAP applicants pay an administrative fee (currently \$250 per crop).

One general policy question for crop insurance is whether or not there is overlap in payments with other farm programs. The potential for overpayment is reduced in the SURE program by including crop insurance indemnities (and other program payments) in its farm revenue calculation for individual producers. In contrast, the ACRE program includes producer-paid crop insurance premiums in the producer’s farm benchmark revenue guarantee. This helps trigger a payment earlier than would otherwise occur, but does not alter the program payment rate, which is based on state-level yields and national prices. For the other major farm programs (direct/counter-cyclical and marketing assistance loan), payments are made independent from crop insurance indemnities, but the same market factors may play a role in triggering payments in some instances.

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<sup>9</sup> For more on USDA commodity programs, see CRS Report RL34594, *Farm Commodity Programs in the 2008 Farm Bill*, by Jim Monke; and CRS Report R40422, *A New Farm Program Option: Average Crop Revenue Election (ACRE)*, by Dennis A. Shields.

<sup>10</sup> A farmer’s price risk can also be managed by contracting production with buyers or by using the futures market to lock in selling prices.

<sup>11</sup> For more details on agricultural disaster programs, see CRS Report RS21212, *Agricultural Disaster Assistance*, by Ralph M. Chite, and CRS Report R40452, *A Whole-Farm Crop Disaster Program: Supplemental Revenue Assistance (SURE)*, by Dennis A. Shields.

## Federal Program Costs

The annual agriculture appropriations bill traditionally makes two separate appropriations for the federal crop insurance program. It provides discretionary funding for the salaries and expenses of the RMA. It also provides “such sums as are necessary” for the Federal Crop Insurance Fund, which finances all other expenses of the program, including premium subsidies, indemnity payments, and reimbursements to the private insurance companies.

Government costs for crop insurance have increased substantially in recent years. After ranging between \$2.1 and \$3.6 billion during FY2000-FY2006, costs rose to \$3.9 billion in FY2007 and \$5.7 billion in FY2008 (the most recent year for which data are available) as higher policy premiums from rising crop prices drove up premium subsidies and expense reimbursements to private insurance companies (**Table 2**). Expenditures in FY2008 mainly reflect the 2007 crop year (since fall harvest overlaps with the beginning of the fiscal year).

In FY2008, the largest government cost was the subsidy on policy premiums for producers, totaling \$5.3 billion. The next largest component—\$2.0 billion—was reimbursement of administrative and operating (A&O) expenses to private insurance companies. With premiums reflecting only costs associated with policy risk, the A&O reimbursement is meant to pay delivery costs. In recent years, the federal government also has realized underwriting gains (premiums received in excess of indemnities), which has partially reduced total government costs. The underwriting gains (or losses) are derived in part from the federal government’s role in providing the first level of reinsurance—that is, insurance for insurance companies.

**Table 2. Government Cost of Federal Crop Insurance**  
(millions of dollars)

Fiscal Year	Program Losses or (Gains) <sup>a</sup>	Federal Premium Subsidy	Private Company A&O Expense Reimbursements <sup>b</sup>	Other Costs <sup>c</sup>	Total Government Cost
2000	196	1,353	540	86	2,175
2001	725	1,707	648	82	3,162
2002	1,182	1,513	656	115	3,466
2003	822	1,874	743	149	3,588
2004	(305)	2,387	900	143	3,125
2005	(293)	2,070	783	139	2,699
2006	(31)	2,517	960	125	3,571
2007	(1,068)	3,544	1,341	123	3,940
2008 (est.)	(1,717)	5,301	2,016	137	5,737

**Source:** U.S. Department of Agriculture, Risk Management Agency.

- Government’s underwriting loss (gain if negative) = the difference between total indemnity payments for crop losses and total premiums (farmer and government paid), plus or minus any private company underwriting losses or gains.
- A&O = administrative and operating.
- Other costs primarily include federal salaries of USDA’s Risk Management Agency and beginning in 2002, various research and development initiatives mandated by the Agriculture Risk Protection Act of 2000 (P.L. 106-224).

## **Risk Sharing and Private Company Expense Reimbursement**

Risk sharing between USDA and the private companies and A&O reimbursements to the companies are spelled out in a Standard Reinsurance Agreement (SRA), which plays a large role in determining program costs. The 2008 farm bill allows USDA to renegotiate the SRA once every five years starting with the 2011 reinsurance year (which begins July 1, 2010). The current SRA was completed in June 2004.

### **Standard Reinsurance Agreement (SRA)**

Under the SRA, the reimbursement rate for A&O expenses averages 22% to 24% of total premiums.<sup>12</sup> This means that for every \$100 in premiums collected, the companies receive an administrative payment of \$22 to \$24 from the federal government. The reimbursement rate varies by insurance product, depending on whether it is for a yield-based or a revenue insurance product.

The SRA also defines risk-sharing between the government and private insurance companies. Under the SRA, insurance companies may transfer some liability associated with riskier policies to the government and retain profits/losses from less risky policies.<sup>13</sup> This transfer of risk is accomplished through a set of reinsurance funds maintained by FCIC. Within 30 days of the sales closing dates for each crop, companies allocate each policy they sell to one of three funds: assigned risk, developmental, or commercial. The developmental and commercial funds are further subdivided by insurance product type (CAT, buy-up, and revenue). Each company then decides what proportion of premiums (and potential for losses/gains) to retain within each reinsurance fund, subject to required minimum retention limits of individual funds. The ceded (i.e., not retained) portion goes to the government.

The assigned risk fund is used for policies believed to be high-risk; it helps ensure that benefits of the federal crop insurance program are extended to all eligible farmers, regardless of risk. Depending on the state where the policy is sold, companies retain only 15% to 25% of their business as specified in the SRA. Consequently, the federal government assumes a large portion of liability associated with high-risk policies. The SRA also specifies limits on the proportion of a company's business that may be placed in the assigned risk fund.

When the assigned risk designation limit is reached, companies allocate policies—particularly medium-risk policies and pilot programs—to the developmental fund. Each company decides what proportion of its business (by plan type and state) to retain, ranging from 35% to 100%.

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<sup>12</sup> The 2008 farm bill (Sec. 12016(E)) reduces the A&O reimbursement by 2.3 percentage points beginning with the 2009 reinsurance year (July 1, 2008). Also, the farm bill reduces the A&O reimbursement rate to 12% for any plan of insurance that is based on area-wide losses. The farm bill also reduced the target loss ratio (indemnities paid divided by premiums collected) from 1.075 to 1.00.

<sup>13</sup> Dmitry V. Vedenov et al., "Portfolio Allocation and Alternative Structures of the Standard Reinsurance Agreement," vol. 31, no. 1 (April 2006), pp. 57-73, <http://ageconsearch.umn.edu/bitstream/10145/1/31010057.pdf>.

The commercial fund is for policies for which companies expect to have only a small amount of losses. The companies select to retain (by plan type and state) between 50% and 100% of premium and associated liability of policies in the commercial fund. In 2008, about 20% of total premium value was placed in assigned risk, 10% in developmental, and 70% in commercial.

Following the allocation of policies to one of the three funds, the gain/loss sharing for a company's retained business is based on loss ratios (indemnities paid divided by premiums collected) as established in the SRA. As a general rule, the higher the loss ratio (i.e., potential for loss), the lower the company share of gains or losses (and vice versa).<sup>14</sup>

The final risk-sharing component of the SRA is the "net book quota share." Once a company's net gain or loss is calculated over its entire "book of business," the company must cede a 5% share of its cumulative underwriting gains/losses to the government. As a result, the government receives a portion of underwriting gains from a company's retained business (but will also pay a portion of the losses, if realized). Since the company's total book includes a higher proportion of policies with lower risk, this portion is generally a positive value, which offsets part of the government costs of the program.

## Trends in A&O Reimbursement and Underwriting Gains

Since A&O reimbursements are based on a percentage of premiums, the dollar amount of A&O reimbursement has risen sharply in recent years as premiums have risen to reflect higher crop prices. The A&O reimbursement increased from an average of \$881 million during 2004-2006 to \$2 billion in 2008. RMA data also indicate that A&O reimbursement per policy more than doubled from \$750 to \$1,748.<sup>15</sup> Similarly, company underwriting gains (the amount by which a company's share of retained premiums exceeds its indemnities) have increased substantially in recent years as weather has been generally favorable for growing crops (**Table 3**). During this period, increases in insured acreage and higher crop prices have also increased gross liability. Liability represents total exposure of the program, meaning that if all participating farmers suffer losses to the full extent of coverage, program indemnities would be the total liability.

Some observers argue that the reimbursement rate should be pegged to something other than premium value, such as the number of policies sold, to better reflect actual costs and to help reduce federal expenditures. If premiums are actuarially sound, the administrative costs of writing a policy are likely not proportional to the value of the policy (e.g., whether 10 acres or 1,000 acres, or \$3 per bushel or \$9 per bushel). The private crop insurance companies contend that any reductions in the A&O reimbursement will negatively affect the crop insurance industry and possibly jeopardize the delivery of crop insurance, particularly in high-risk areas.

The Government Accountability Office (GAO) recently released a study on costs associated with administering the crop insurance program.<sup>16</sup> GAO concluded that the current structure of A&O reimbursements "present[s] an opportunity to reduce government spending without compromising the crop insurance program's safety net for farmers." According to GAO, the

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<sup>14</sup> The exception is, at very low loss ratios, the company share of gains declines.

<sup>15</sup> USDA, Risk Management Agency, "Federal Crop Insurance Program History" data sheet, Washington, DC, April 3, 2009.

<sup>16</sup> U.S. Government Accountability Office, *Crop Insurance—Opportunities Exist to Reduce the Costs of Administering the Program*, Washington, DC, April 2009, <http://www.gao.gov/new.items/d09445.pdf>.

method for calculating the A&O reimbursement should be redesigned to better reflect reasonable business expenses, in terms of dollars per policy, rather than crop prices. The current approach using crop prices, GAO says, has generated a “kind of windfall” for many insurance agencies/agents as insurance companies, using funds from increased levels of A&O reimbursements, pay higher commissions to compete for each other’s “book of business” and associated underwriting gains. The crop insurance industry contends that overall agent compensation is consistent with compensation paid in related insurance industries.<sup>17</sup> In response to GAO’s recommendation, USDA’s Risk Management Agency said it will be evaluating potential alternative A&O calculation methodologies as part of the next SRA renegotiation with insurance companies.<sup>18</sup>

**Table 3. Federal Crop Insurance Program and Company Data**

Fiscal Year	Gross Premium <sup>a</sup> (\$ million)	Gross Liability <sup>b</sup> (\$ million)	Gross Loss Ratio <sup>c</sup>	Private Company Loss Ratio <sup>c</sup>	Private Company Underwriting Gain (Loss) <sup>d</sup> (\$ million)
2000	2,538	34,000	1.02	0.70	282
2001	2,979	37,000	1.00	0.73	346
2002	2,911	37,000	1.39	0.91	(47)
2003	3,436	41,000	0.95	0.76	381
2004	4,087	47,000	0.79	0.62	691
2005	3,945	44,000	0.52	0.43	917
2006	4,709	55,000	0.73	0.59	883
2007	6,549	67,000	0.52	0.48	1,578
2008 (est.)	9,849	90,000	0.73	0.68	1,710

**Source:** U.S. Department of Agriculture, Risk Management Agency; data as of 4/1/09.

- a. Farmer-paid premium plus government-paid premium subsidy.
- b. Liability represents total exposure of the program, meaning that if all participating farmers suffered losses to the full extent of coverage, program indemnities would be the total liability.
- c. Indemnities divided by premiums. Gross loss ratio is for the program in total (government plus private companies).
- d. The underwriting gains represent the amount by which the company’s share of retained premiums exceeds its indemnities (vice versa for underwriting losses).

<sup>17</sup> On the same day as the June 1, 2009, release of the April 2009 GAO study, 14 organizations affiliated with the crop insurance industry wrote to Congress to comment on the crop insurance program performance and the need for maintaining current subsidies and A&O reimbursements. See <http://www.farmpolicy.com/wp-content/uploads/2009/06/gaocropinsuranceletter.pdf>.

<sup>18</sup> U.S. Government Accountability Office, *Crop Insurance—Opportunities Exist to Reduce the Costs of Administering the Program*, Washington, DC, April 2009, pp. 32-34, <http://www.gao.gov/new.items/d09445.pdf>.

## Issues the for 111<sup>th</sup> Congress

Given concerns about the federal deficit, reductions in funding for crop insurance have been included in the Administration's budget proposal (proposed cuts of \$500 million per year).<sup>19</sup> In contrast, the FY2010 budget resolution conference report (S.Con.Res. 13) did not contain cuts related to crop insurance.<sup>20</sup> The Administration's proposal calls for three specific cuts: (1) reduce subsidies on the premiums that producers pay for policies by five percentage points on all coverage levels, (2) increase the federal government's share on underwriting gains to 20% from 5%, and (3) reduce the premium for CAT coverage by 25% and charge a sliding scale fee for CAT coverage from \$300 to \$5,000, depending on the crop value. No changes were suggested for the reimbursement rate for private company operating expenses.

According to the Administration, the proposed subsidy reductions are justified because new risk management programs created in the 2008 farm bill (ACRE and SURE) reduce the need for continuing the same level of crop insurance subsidies. Moreover, the Administration says the proposal would control "crop insurance costs [that] have ballooned in recent years" while reducing "a corporate subsidy that has grown disproportionately as participation has increased since 2001."<sup>21</sup>

Insurance companies and farm groups are concerned that significant reductions in federal support will negatively impact the financial health of the crop insurance industry and possibly jeopardize the delivery of crop insurance, particularly in high-risk areas. The crop insurance industry argues that cuts to the program were already made in the 2008 farm bill, and additional cuts would be unfair.<sup>22</sup> Others point to recent increases in operating expense reimbursements and underwriting gains (**Table 3**), questioning whether these higher levels are necessary for maintaining a viable crop insurance industry.

Separate from the FY2010 budget deliberations, USDA may renegotiate the Standard Reinsurance Agreement beginning with the 2011 season (which starts July 1, 2010), as provided under the 2008 farm bill. This would likely occur later in 2009 and into the spring of 2010. Any significant changes affecting industry reimbursements and loss sharing would likely lead to a strong reaction from the insurance industry.

When USDA's Risk Management Agency released its final version of the current SRA on June 10, 2004, the revised SRA was criticized by the crop insurance industry and various farmer groups as being detrimental to the program and the industry. According to USDA estimates, the changes were expected to reduce federal costs (and consequently industry revenue) by \$22 million in the first year and \$36 million in the second and subsequent years. Despite these changes, expense reimbursement and underwriting gains have increased sharply since 2005. The

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<sup>19</sup> Office of Management and Budget, "A New Era of Responsibility: Renewing America's Promise," February 26, 2009, at [http://www.whitehouse.gov/omb/assets/fy2010\\_new\\_era/A\\_New\\_Era\\_of\\_Responsibility2.pdf](http://www.whitehouse.gov/omb/assets/fy2010_new_era/A_New_Era_of_Responsibility2.pdf).

<sup>20</sup> Note that the Senate-passed budget resolution had assumed crop insurance reductions of \$70 million per year over five years.

<sup>21</sup> Office of Management and Budget, *Terminations, Reductions, and Savings - Budget of the U.S. Government Fiscal Year 2010*, Washington, DC, 2009, <http://www.whitehouse.gov/omb/budget/fy2010/assets/trs.pdf>.

<sup>22</sup> Philip Brasher, "Proposed Ag Subsidy Cuts Dropped," *Des Moines Register*, April 8, 2009. For farm bill changes, see CRS Report RL34207, *Crop Insurance and Disaster Assistance in the 2008 Farm Bill*, by Ralph M. Chite and Randy Schnepf.

crop insurance industry argues that generally good weather, which limited widespread crop losses, and higher crop prices (and related premium levels) contributed to these gains to the industry, and such conditions will not necessarily continue.

For policymakers, a main concern when contemplating financial changes to the crop insurance program would likely be saving federal dollars without adversely affecting farmer participation, policy coverage, or industry interest in selling and servicing crop insurance products to farmers.

## **Farmer Concerns with Crop Insurance**

The Subcommittee on General Farm Commodities and Risk Management of the House Agriculture Committee held a hearing on April 22, 2009, to receive input on the crop insurance program from farmers. Based on the testimony, farmers appear to be generally satisfied with the overall crop insurance program and do not seek major changes. However, the producer groups represented at the hearing listed several issues that need attention.<sup>23</sup>

Some farm groups requested that current subsidies be maintained and that premiums be made more affordable. Some groups specifically urged Congress to use caution when making program changes in the next SRA negotiations so that farmer participation does not slip. Corn producers want their premiums reduced because the loss ratio has been reportedly only 0.58 (indemnities paid divided by premiums). On a positive note, producers said they appreciate the recently reduced premiums under the 2008 farm bill for policies with enterprise units (coverage for groups of fields instead of individual fields). Finally, in an effort to raise the sorghum insurance price guarantee relative to corn, the National Sorghum Producers want greater transparency in their commodity's insurance price calculation, as required by the 2008 farm bill. The group contends that USDA is not abiding by the law.

Similar to organizations representing field crop producers, the American Nursery and Landscape Association said that the nursery industry considers the federal crop insurance program to be a valuable component of risk management practices. According to the association, incremental program enhancements have been made in recent years, including the use of a grower's wholesale price list for the basis of coverage. However, they contend that the program falls short of adequately addressing the extreme diversity and unique situations found in the industry because production practices are less uniform than for major field crops. Producers say there is a great degree of variation in program management across the country, depending upon agents' and claim adjusters' familiarity with industry practices. A certification program would be helpful, they say.

Congress heard from national farm organizations representing a cross-section of American agriculture. The American Farm Bureau Federation (AFBF) would like USDA to address shallow losses, which occur when losses are significant for the farmer but not enough to trigger an indemnity.<sup>24</sup> Also, the group points out a need to address declines in actual production history

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<sup>23</sup> Statements from witnesses are available at <http://agriculture.house.gov/hearings/statements.html>. U.S. Congress, House Committee on Agriculture, Subcommittee on General Farm Commodities and Risk Management, *To Review Producers' Views on the Effectiveness and Operations of the Federal Crop Insurance Program*, 111<sup>th</sup> Cong., 1<sup>st</sup> sess., April 22, 2009.

<sup>24</sup> Under the 2008 farm bill, the new Supplemental Revenue Assistance Program (SURE) program has provisions to partially address the shallow loss problem, at least at the whole-farm level, by applying factors to the individual farm program guarantee level (115% of insured value of each insurable commodity and 120% of value of non-insurable (continued...))

(APH), which is used for determining the insurance guarantee. Some farmers are subject to a declining insurance guarantee because of recent repeated disasters. (The American Sugar Cane League commented on the inadequacy of the APH for sugar cane because it is adversely affected by an old variety that is no longer being planted.)

Another broad-based farm organization, the National Farmers Union (NFU), contends that crop insurance remains inadequate for those with multi-year disasters, and that crop quality loss discounts applied in insurance contracts do not reflect realities of the marketplace. The organization also wants insurance companies to offer coverage in all areas and not “cherry pick” regions that are most profitable. Finally, the organization requests a revised auditing procedure that could avoid duplicative reviews of records. Currently, RMA requires an automatic review if a farmer receives an indemnity exceeding \$100,000.

Farm groups identified the need for better information management. The National Association of Wheat Growers wants streamlined acreage reporting between crop insurance and other USDA farm programs, while the AFBF has asked Congress to push for USDA’s completion of the Comprehensive Information Management System (CIMS) project. The project is designed to manage data used for both crop insurance and farm commodity programs, thereby reducing duplicative efforts by both producers and USDA personnel.

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commodity). See CRS Report R40452, *A Whole-Farm Crop Disaster Program: Supplemental Revenue Assistance (SURE)*, by Dennis A. Shields.