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# Farm Safety Net Programs: Background and Issues

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## Summary

The U.S. Department of Agriculture (USDA) operates several programs that supplement the income of farmers and ranchers in times of low farm prices and natural disasters. Federal crop insurance, farm programs, and disaster assistance are collectively called the farm safety net.

**Federal crop insurance** is often referred to as the centerpiece of the farm safety net because of its cost and broad scope for addressing natural disasters. The program is permanently authorized and makes available subsidized insurance for more than 130 commodities (ranging from apples to wheat) to help farmers manage risks associated with a loss in yield or revenue. Program cost is projected by the Congressional Budget Office to total \$8.8 billion per year over the next decade. Producers pay a portion of the premium which increases as the level of coverage rises. The federal government pays the rest of the premium—62%, on average, in 2014—and covers the cost of selling and servicing the policies.

**Farm commodity programs** historically represented the heart of U.S. farm policy by virtue of their long history (dating back to the 1930s). Price and income support is based primarily on statutorily fixed prices and not market prices (as in crop insurance), which can be quite low in some years. For crop years 2014-2018, the Agricultural Act of 2014 (2014 farm bill, P.L. 113-79) established minimum prices via the marketing loan program for approximately two dozen commodities, including corn, soybeans, wheat, rice, and peanuts. In addition, producers with production histories for covered crops have a one-time choice between *Price Loss Coverage (PLC) payments* and *Agriculture Risk Coverage (ARC) payments*. Costs were projected in March 2015 at about \$4 billion per year over the next decade. Programs are free for producers.

**Agricultural disaster assistance** is permanently authorized for livestock and orchards. Under the 2014 farm bill, nearly all parts of the U.S. farm sector are now covered by either a disaster program or federal crop insurance, which is expected to reduce calls for ad hoc assistance. As of May 2015, producer payments had totaled more than \$5 billion for losses in FY2012-FY2015.

Compared with the previous farm bill, the 2014 farm bill was enacted with more crop insurance options and higher reference prices designed to trigger payments more often than under previous law. Funding was accomplished by eliminating direct payments that had been made annually since 1996 but played no role in managing farm risk because they did not vary with farm prices.

Several facets of the current farm safety net might be of interest to the 114<sup>th</sup> Congress. An initial focus could be on USDA's implementation of the farm safety net provisions. Issues could include the delayed payment schedule, which could expose cashflow problems, and the pending "actively engaged" rule that could affect program eligibility for some producers.

With ongoing concern for budget deficits and federal spending, Congress also might be interested in reviewing the effectiveness of the revised safety net and actual costs, which are expected to be higher than earlier projections due to lower farm prices. Farm safety net proponents say the current suite of programs has been designed for such situations and is needed to adequately protect producers and the overall agriculture sector. Critics believe that a simplified approach might be more effective and less expensive, with funds used instead for broad societal gains, such as investment in agricultural research or transportation infrastructure. The Administration has proposed trimming crop insurance subsidies, arguing that the safety net could remain effective.

## Contents

Overview .....	1
Federal Crop Insurance.....	2
Farm Commodity Programs .....	3
Agricultural Disaster Assistance.....	5
USDA Discretionary Support .....	6
Historical Policy Discussion.....	6
Prospective Issues.....	7
Implementation .....	7
Timing of Farm Program Payments.....	8
“Actively Engaged” Rule.....	8
Implementing SCO and STAX for Upland Cotton .....	9
Actual Production History (APH) for Crop Insurance.....	10
Additional Crop Insurance Provisions .....	10
Agricultural Disaster Payments .....	10
Government Outlays and Policy Issues.....	11
Potential for Higher Farm Program Outlays .....	11
“Generic” Base Acres .....	12
Crop Insurance Subsidies.....	12
WTO Trade Concerns.....	13
Design of Overall Farm Safety Net.....	13

## Figures

Figure A-1. Price Loss Coverage (PLC).....	15
Figure A-2. Agriculture Risk Coverage (ARC)–County Coverage .....	15
Figure A-3. Crop Insurance and Farm Commodity Programs.....	16

## Tables

Table 1. Farm Support by Commodity .....	1
Table 2. Reference Prices and Loan Rates in the 2014 Farm Bill .....	4
Table A-1. Hypothetical Corn/Soybean Farm in 2014 .....	17
Table A-2. Hypothetical Wheat/Lentil Farm in 2014 .....	18
Table A-3. Hypothetical Peanut/Cotton Farm in 2014 .....	19

## Appendixes

Appendix. Farm Commodity Program Examples .....	14
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## **Contacts**

Author Contact Information ..... 19

## Overview

Congress has devised a variety of programs operated by the U.S. Department of Agriculture (USDA) to support farm income and help farmers and ranchers manage production or price risk. The programs essentially supplement farm incomes in times of low farm prices and natural disasters, and they are collectively called the farm safety net. The three main components are (1) permanently authorized federal crop insurance, (2) farm commodity price and income support programs for crop years 2014-2018, and (3) permanently authorized agricultural disaster programs. Additional support is provided through emergency loans and USDA discretionary assistance. The suite of programs is designed to allow for maximum farmer choice and flexibility.

Most farmers and ranchers are eligible for at least one of these federal programs. Some commodities are supported by only one method; others receive support through a combination of program tools. Within the farm safety net, federal crop insurance is most extensive, as policies are available for much of U.S. agriculture, including grains, fruits and vegetables, pasture, nursery crops, and livestock gross margins. About two dozen of these crops (e.g., corn, soybeans, wheat) are eligible for both crop insurance and farm commodity programs, including minimum statutory prices. Sugar and dairy have their own programs, while disaster programs support livestock producers. The federal cost for the farm safety net was projected in March 2015 to average about \$13.5 billion per year for FY2015-FY2024 (Table 1).

**Table 1. Farm Support by Commodity**

Commodity	Federal Crop Insurance	Farm Commodity Programs	Disaster Assistance
Feed grains (corn, sorghum, barley, oats), peanut, pulses (dry peas, lentils, chickpeas), rice, soybeans, other oilseeds, wheat	Yield or revenue guarantees based on historical yields and <i>same-year market</i> prices, plus county yield or revenue guarantee for some crops (Suppl. Coverage Option—SCO)	Price Loss Coverage (PLC) and Ag. Risk Coverage (ARC) - price or revenue guarantee based on historical yields and <i>minimum prices</i> (or 5-year <i>historical prices</i> ); nonrecourse loans with <i>min. prices</i>	—
Upland cotton	Same as above, plus county revenue guarantee (Stacked Income Protection Plan—STAX)	Transition payments in 2014 (and 2015 if STAX is not available); nonrecourse loans with <i>minimum prices</i>	—
Sugar	Yield guarantees based on <i>same-year market prices</i>	Import quotas, nonrecourse loans with <i>minimum prices</i> , and marketing allotments	—
Fruits, vegetables, & nursery	Yield or revenue guarantees, & other products, incl. whole farm	—	Payment for loss of fruit trees and vines (assets)
Livestock & poultry	Insurance for livestock prices, gross margins, & pasture/forage	—	Payment for loss of animals, forage, & feed
Dairy	Insurance for livestock prices, gross margins, & pasture/forage	Margin Protection Program (milk price minus feed costs)	Payment for loss of animals, forage, & feed
Projected ave. annual cost	\$8.8 billion	\$4.2 billion	\$0.5 billion

**Source:** CRS Report IF00025, Overview of Farm Safety Net Programs (In Focus); costs from CBO.

**Notes:** Nonrecourse loans (for cash flow and low-price protection) also are available for extra-long staple cotton, wool, mohair, and honey. Emergency loans in disaster-declared counties are not commodity-specific. Uses CBO estimates for FY2015-FY2024 as of March 2015; projections are sensitive to market changes.

# Federal Crop Insurance<sup>1</sup>

Federal crop insurance often is referred to as the centerpiece of the farm safety net because of its broad scope and cost. The program makes available subsidized insurance for more than 130 commodities to help farmers manage financial risks associated with a loss in yield or crop revenue. Insurable causes of loss include adverse weather such as drought and excess rain. A distinguishing feature is that guarantees are based on market prices and not on statutory minimums, as provided in farm commodity programs. Program cost was projected by the Congressional Budget Office (CBO) in March 2015 to total \$8.8 billion per year during FY2015-FY2024, about twice the level of farm commodity programs.

Insurable commodities include major field crops such as wheat, corn, soybeans, cotton, peanuts, and rice, as well as many specialty crops (including fruit, tree nut, vegetable, and nursery crops), pasture, rangeland, forage crops, and livestock (prices and operating margins). Policies cover more than 250 million acres nationwide. For major crops, three-fourths or more of U.S. planted acreage is insured under the federal crop insurance program. Producers who grow a crop not covered by crop insurance can purchase coverage through the Noninsured Crop Disaster Assistance Program (NAP).

The program is permanently authorized by the Federal Crop Insurance Act, as amended (7 U.S.C. §1501 et seq.). The Federal Crop Insurance Corporation (FCIC) was created as a wholly owned government corporation in 1938 to carry out the program. The program is a partnership between U.S. Department of Agriculture's Risk Management Agency (RMA) and private industry. RMA approves and supports products, develops and approves the premium rates, administers premium subsidies, reimburses private companies for their administrative and operating costs (i.e., delivery costs for selling and servicing the policies), and reinsures company losses. Producer premium subsidies account for three-fourths of total federal crop insurance costs.

Farmers annually purchase about 1.2 million policies, with many producers purchasing multiple policies depending on the number of crops grown and other factors. Policies protect against individual farm losses in yield, crop revenue, or whole farm revenue. Area-wide policies are available for some crops, whereby an indemnity is paid when there is an overall loss over a broad geographic area (e.g., county). For some policies, the revenue guarantee can increase if the harvest price is higher than the expected price calculated in the springtime prior to planting, thereby increasing the point at which indemnities are triggered.

In practice, the producer selects a coverage level and absorbs the initial loss through the deductible. For example, a coverage level of 70% has a 30% deductible (for a total equal to 100% of the expected value prior to planting the crop); in this case an indemnity is made for losses exceeding 30%. The producer pays a portion of the premium, and the federal government pays the rest of the premium—62%, on average, in 2014—plus covers the cost of selling and servicing the policies. This differs from farm commodity programs (see “Farm Commodity Programs,” below), which require no participation fees. Also unlike farm commodity programs, crop insurance has no subsidy limits, and participants can be eligible regardless of income levels.

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<sup>1</sup> For more information, see CRS Report R40532, *Federal Crop Insurance: Background*, and CRS Report R43494, *Crop Insurance Provisions in the 2014 Farm Bill (P.L. 113-79)*.

## Farm Commodity Programs<sup>2</sup>

USDA farm commodity programs historically represented the heart of U.S. farm policy, by virtue of their long history (dating back to the 1930s) and because price and income support is based primarily on statutorily fixed prices and not market prices (as in crop insurance), which can be quite low in some years. Program costs were projected in March 2015 by CBO at about \$4.2 billion per year over FY2015-FY2024. Funding is provided through the Commodity Credit Corporation (CCC), USDA’s program financing mechanism. USDA’s Farm Service Agency (FSA) delivers CCC-funded commodity program benefits through a network of local (“county”) offices overseen by committees of elected farmers.

The statutory authority underpinning USDA-CCC programs is provided mainly by three permanent laws: the Agricultural Adjustment Act of 1938 (P.L. 75-430), the Agricultural Act of 1949 (P.L. 81-439), and the CCC Charter Act of 1948 (P.L. 80-806). Congress frequently alters or suspends provisions of these laws through omnibus, multi-year farm bills. The most recent omnibus farm law is the Agricultural Act of 2014 (P.L. 113-79). This law is effective for the 2014-2018 crop years. To reduce the deficit and pay for changes to federal crop insurance and farm commodity programs, Congress eliminated fixed decoupled or “direct” payments that had been in place since the 1996 farm bill and were not triggered by declining prices or a farm loss.

The 2014 farm bill requires USDA to offer farm commodity support, including minimum prices, for wheat, feed grains (corn, sorghum, barley, oats), cotton (upland and extra-long staple—ELS), rice, soybeans, other oilseeds (sunflower seed, rapeseed, canola, safflower, flaxseed, mustard seed, crambe, and sesame seed), peanuts, refined beet and raw cane sugar, wool, mohair, honey, dry peas, lentils, and chickpeas. The mix of supported crops reflects historical policy goals and compromises. The most recent additions were pulse crops (dry peas, lentils, chickpeas) in 2002.

**Covered Commodities: Wheat, Feed Grains, Rice, Peanuts, Soybeans, Other Oilseeds, Dry Peas, Lentils, and Chickpeas.** For each “covered commodity” in the 2014 farm bill, eligible producers (those with past production histories for these crops) had a one-time choice in early 2015 between *Price Loss Coverage (PLC) payments* and *Agriculture Risk Coverage (ARC) payments*, depending on their preference for protection against a decline in either (a) crop prices or (b) crop revenue.<sup>3</sup> PLC payments make up the difference between the crop’s average market price and its statutory “reference price” (see **Table 2**), while ARC payments make up the difference between a county revenue guarantee (based on five-year average crop prices or statutory minimums) and actual crop revenue. Payments to a producer are paid on 85% of the farm’s acreage history (i.e., “base”). Rather than selecting between PLC and the county ARC guarantee for each covered commodity, a farmer can select a farm-level “individual” ARC guarantee, which combines all covered crops into a single, whole-farm revenue guarantee. Payment is based on 65% of acreage history. In response to a trade dispute with Brazil, upland cotton is no longer a covered commodity, with support now provided by a new crop insurance policy called the Stacked Income Protection Plan (STAX) in addition to marketing assistance loans (see below).

<sup>2</sup> For more information, see CRS Report R43448, *Farm Commodity Provisions in the 2014 Farm Bill (P.L. 113-79)*.

<sup>3</sup> 7 C.F.R. §1412; Commodity Credit Corporation and USDA Farm Service Agency, “Agriculture Risk Coverage and Price,” 79 *Federal Register* 57703-57721, September 26, 2014. For program purposes, producers/landowners could reallocate base acres and update yields between September 29, 2014, and February 27, 2015. They could make the PLC/ARC program choice between November 17, 2014, and March 31, 2015.

**Table 2. Reference Prices and Loan Rates in the 2014 Farm Bill**

Crop	Reference Price	Loan Rate	Crop	Reference Price	Loan Rate
Wheat, \$/bu	5.50	2.94	Peanuts, \$/ton	535	355
Corn, \$/bu	3.70	1.95	Peas, dry, \$/cwt	11.00	5.40
Sorghum, \$/bu	3.95	1.95	Lentils, \$/cwt	19.97	11.28
Barley, \$/bu	4.95	1.95	Sm.chickpeas, \$/cwt	19.04	7.43
Oats, \$/bu	2.40	1.39	Lg.chickpeas, \$/cwt	21.54	11.28
Upland Cotton, \$/lb	n.a.	0.45 to 0.52	Wool, graded, \$/lb	n.a.	1.15
ELS Cotton, \$/lb	n.a.	0.7977	Wool, nongraded	n.a.	0.40
Rice, long grain \$/cwt	14.00	6.50	Mohair \$/lb	n.a.	4.20
Rice, med. grain \$/cwt	14.00; 16.10 for temperate <i>japonica</i>	6.50	Honey, \$/lb	n.a.	0.69
Soybeans, \$/bu	8.40	5.00	Sugar, raw cane, \$/lb	n.a.	0.1875
Minor oilseeds, \$/lb	0.2015	0.1009	Sugar, refined beet, \$/lb	n.a.	0.2409

**Source:** CRS from 2014 farm bill (P.L. 113-79).

**Notes:** n.a. = not applicable. Crops with reference prices are called “covered commodities.” Minor oilseeds include sunflower seed, rapeseed, canola, safflower, flaxseed, mustard seed, crambe, and sesame seed.

Unlike federal crop insurance, producers do not pay to participate in these programs. Payment recipients can plant any combination of crops on their land, but conservation rules must be followed. The **Appendix** contains graphical illustrations and numeric examples of PLC and ARC.

Producers, regardless of whether they receive the above payments, also are eligible for *nonrecourse marketing assistance loans* and *loan deficiency payments*, which provide cash flow and additional price protection at statutory minimum prices. (See **Table 2** for loan rates.) To qualify, a farmer pledges the stored crop as collateral. Nonrecourse loans generally must be repaid with interest within nine months or else the producer forfeits the pledged commodity to the government, which has “no recourse” other than to accept it in lieu of money. However, two features are intended to help avert forfeitures and subsequent buildup of CCC-owned surpluses. First, the “marketing loan” feature enables the farmer to repay the loan at a USDA-calculated rate approximating market prices. If that repayment rate is below the loan rate, the farmer captures the difference as a subsidy (marketing loan gain). Loan deficiency payments (equal to marketing loan gains) also are available to eligible producers who choose not to take out a crop loan.

**Upland Cotton, ELS Cotton, Wool, Mohair, Honey.** These commodities are not eligible for PLC/ARC payments, but producers can receive nonrecourse marketing assistance loans and (except for ELS cotton) loan deficiency payments.

**Payment Limits and Adjusted Gross Income Eligibility.** Farm commodity program benefits (except for “gains” from loan forfeitures) are subject to a combined payment limit of \$125,000 per person, with an additional separate limit of \$125,000 for peanuts. Also, the income limit per person for program eligibility is \$900,000 of adjusted gross income (three-year average). The dollar amounts double for a married couple. Finally, persons must be “actively engaged” in farming. With benefits from forfeited loans not counted against the payment limit, potential payments for PLC/ARC have generated concerns that loans for peanuts and other crops could be forfeited, resulting in government stock build-up, if producers approach the \$125,000 limit.

**Sugar.** A combination of import quotas, nonrecourse loans, and marketing allotments (to limit sales by processors) is intended to support prices at 18.75¢/lb. (raw cane) and 24.09¢/lb. (refined beet), and at no net cost to the government. A sugar-to-ethanol (feedstock flexibility) backstop is available if allotments and import quotas fail to keep market prices above guaranteed levels.<sup>4</sup>

**Milk.** Dairy producers are eligible for the Margin Protection Program (MPP), which makes payments when the national margin (average farm price of milk minus an average feed cost ration) falls below a producer-selected margin ranging from \$4.00 per hundredweight (cwt.) to \$8.00/cwt. Participating producers pay premiums for margin coverage above \$4.00/cwt. To assist small farms, lower premiums are charged for the first 4 million pounds of annual output (approximately 170 cows), while higher premiums are charged on amounts above 4 million lbs. A 25% discount on premiums is available for 2015 on coverages below \$8.00/cwt.<sup>5</sup>

## Agricultural Disaster Assistance<sup>6</sup>

The 2014 farm bill permanently authorized three disaster programs for livestock and one for orchards and vineyards. Nearly all parts of the U.S. farm sector now are covered by either a disaster program or federal crop insurance, which is expected to reduce calls for ad hoc federal assistance. CBO estimates annual outlays at about \$500 million per year for FY2015-FY2024. The programs are retroactive, and producer payments as of May 2015 totaled more than \$5 billion for losses in FY2012-FY2015. The programs are:

1. **Livestock Indemnity Program (LIP)**, which provides payments to eligible livestock owners and contract growers at a rate of 75% of market value for livestock deaths in excess of normal mortality caused by adverse weather;
2. **Livestock Forage Disaster Program (LFP)**, which makes payments to eligible livestock producers who have suffered grazing losses on drought-affected pasture or grazing land, or on rangeland managed by a federal agency due to fire;
3. **Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish Program (ELAP)**, which provides payments (capped at \$20 million per year) to producers of livestock, honey bees, and farm-raised fish as compensation for losses due to disease, adverse weather, and feed or water shortages; and
4. **Tree Assistance Program (TAP)**, which makes payments to orchardists/nursery tree growers for losses in excess of 15% to replant trees, bushes, and vines damaged by natural disasters.

The programs do not require a disaster declaration, and producers do not pay a fee to participate. For individual producers, combined payments under all programs except TAP may not exceed \$125,000 per year. For TAP, a separate limit of \$125,000 per year applies. Also, to be eligible for a payment, a producer's total adjusted gross income cannot exceed \$900,000. Separately, for all types of farms and ranches, when a county has been declared a disaster area by either the President or the Secretary of Agriculture, producers in that county may become eligible for low-interest emergency disaster (EM) loans. USDA also has several programs that help producers repair damaged land following natural disasters.

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<sup>4</sup> CRS Report R42535, *Sugar Program: The Basics*.

<sup>5</sup> CRS Report R43465, *Dairy Provisions in the 2014 Farm Bill (P.L. 113-79)*.

<sup>6</sup> CRS Report RS21212, *Agricultural Disaster Assistance*; and CRS Report R42854, *Emergency Assistance for Agricultural Land Rehabilitation*.

## USDA Discretionary Support

In addition to the explicitly required assistance described above, federal law has long given USDA the discretion to offer support for virtually any farm commodity. For example, USDA made direct payments to hog producers in 1999 during a period of historically low prices, and to fruit, vegetable, and nursery plant growers affected by Florida hurricanes in 2004 and 2005. The most recent emergency farm assistance extended under discretionary authority was in 2010, when USDA made farm payments for weather-related and other losses to producers of upland cotton, rice, soybeans, poultry, and aquaculture. Authority and funding for these various activities can come from CCC (under the CCC Charter Act) and Section 32 (of P.L. 74-320, a 1935 law).

Section 32 permanently appropriates the equivalent of 30% of annual customs receipts to support the farm sector through a variety of activities. Most of this appropriation (now about \$8 billion per year) is transferred directly to USDA's child nutrition account to fund school feeding and other programs. Much of the remainder provides USDA with a source of discretionary funds, which in addition to the direct payments above also pays for "emergency removals" of surplus agricultural commodities, disaster relief, or other unanticipated needs. USDA annually purchases hundreds of millions of dollars in meats, poultry, fruits, and vegetables under Section 32. Importantly, in annual appropriations acts since FY2012, Congress has restricted some of USDA's authority by prohibiting the use of appropriated funds to pay for salaries and expenses needed to operate a farm disaster program under either funding source.<sup>7</sup>

## Historical Policy Discussion

When commodity programs and the federal crop insurance program were first authorized in the 1930s, most of the country's then 6.8 million farms were diversified and small (by today's standards). There was a perceived need to address the severe economic problems faced by this large segment of rural-based society, where about 25% of the U.S. population resided. Moreover, it was argued, stabilizing the agricultural sector—through guaranteed minimum farm prices, income payments to producers, and/or various supply management techniques—would help to ensure an abundant supply of food and fiber at reasonable prices in the future.

Over the last half century, while farm size and incomes have increased, the perennial challenge of price and income variability has remained, especially as increased globalization exposed U.S. agricultural markets to international events. As a result, policy makers have focused increasingly on risk management rather than traditional price support and supply control. Both Congress and the Administration sought, for many decades, to steer price and income support programs onto a more "market-oriented" course, so that the private market rather than the government would provide economic rewards for production agriculture. And since 1980, to reduce the potential for ad hoc disaster assistance and provide producers with risk management tools, the federal crop insurance program has been enhanced for producers multiple times by increasing subsidy rates and broadening coverage.

Most recently, Congress passed the 2014 farm bill with additional crop insurance options and higher farm program guarantees (reference prices) designed to trigger payments more often than under previous law. Funding was accomplished by eliminating direct payments that had been made annually to eligible producers and farmland owners since 1996 but played no role in managing farm risk because they did not vary with farm prices. Also, as part of the trend toward

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<sup>7</sup> For more information, see CRS Report RL34081, *Farm and Food Support Under USDA's Section 32 Program*.

risk management, the 2014 farm bill's new dairy program and Agriculture Risk Coverage have insurance-like features that reimburse farmers when a loss is triggered.

Supporters of the farm safety net contend that the authorized programs protect against price and market volatility, and provide needed support and/or stability to farmers who otherwise would see plunging incomes and land values due to unfavorable and unpredictable yields. Critics have long argued that U.S. commodity-based policies are outdated and transfer too much risk from private businesses (farms) to the federal government, waste taxpayers' money, and may be detrimental to society in general, particularly if policies encourage farming on environmentally sensitive land.

## Prospective Issues

Several facets of the current farm safety net might be of interest to the 114<sup>th</sup> Congress, including USDA's implementation of the farm safety net provisions of the 2014 farm bill. Also, potential efforts to find budgetary savings could direct attention to government expenditures on commodity programs and subsidy levels for federal crop insurance. Finally, as programs are activated through the five-year life of the 2014 farm bill, Congress might have interest in the overall design of the farm safety net, including the appropriate level of federal farm support and how to best deliver it.

## Implementation

After enactment of the 2014 farm bill in February 2014, USDA immediately began implementing the farm safety net provisions. In April 2014, the disaster programs were some of the first 2014 farm bill programs to be implemented. USDA began issuing disaster payments for 2012 and 2013 losses shortly thereafter. Later in 2014, regulations were published for new commodity programs and crop insurance changes.<sup>8</sup>

The farm program signup involved a series of decisions for farmers in early 2015. The first was the decision for base and program yields. Owners of farms had a one-time opportunity to (1) maintain the farm's 2013 base acres of covered commodities through 2018 or (2) reallocate base acres among those covered commodities planted on the farm at any time during the 2009-2012 crop years. In addition, participants could update their program payment yields (equal to 90% of the 2008-2012 average yield for the farm). The second decision was for the program choice, whereby farm owners and operators had a one-time opportunity to select between PLC, ARC-County Coverage, and ARC-Individual. The final step was for producers to enroll their farms by signing a contract (summer 2015).

In late 2014 and early 2015, USDA's Farm Service Agency and the Cooperative Extension System (including land grant universities), had provided farmers with information for making farm program decisions.<sup>9</sup> Farmers could use decisions tools (developed with funding from the 2014 farm bill) to sift through the program choices, which required collection of farm data and analysis including projections for farm prices through 2018. Farmers considered their options based on maximizing potential government payments and/or protecting against low revenue or prices over the five-year period covered by the farm bill. With a choice of several options (farmers could pick PLC for one crop and ARC-County for another crop, or ARC-Individual for a

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<sup>8</sup> The department summarizes activities related to 2014 farm bill implementation at <http://www.usda.gov/wps/portal/usda/usdahome?contentid=progress-2014-farm-bill.html>.

<sup>9</sup> For more information, see USDA/Farm Service Agency, <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=arpl&topic=landing>.

guarantee that combines all crops), producers were able to tailor the program to their individual farms. However, upfront decisions were required, and some farmers may not be happy with their choice in the future if their program does not activate during difficult financial times and the alternative does.

Nationwide, ARC-County Coverage was elected by 96% of soybean farms, 91% of corn farms, and 66% of wheat farms. Over 90% of rice and peanut farms elected PLC. Few farms, regardless of the commodity mix, elected ARC-Individual.<sup>10</sup>

### **Timing of Farm Program Payments**

Under the 2014 farm bill, farm program payments are delivered about one year (or more) after farmers harvest the crop. For example, any payments associated with corn planted in spring of 2014 and harvested in fall 2014 are not made until October 2015 at the earliest (i.e., FY2016). The delay in payments helped reduce the “budget score” of the farm bill by shifting one year of payments outside the 10-year budget scoring window.

This timing of program payments is significantly later than under the 2008 farm bill when partial payments were made available prior to planting (except for winter wheat), with the remainder delivered shortly after harvest. The old schedule helped farmers with cashflow needs, including paying for their production costs (e.g., seed, fertilizer). Some policy observers and lenders are concerned that farmers might have a cashflow during low-price years. Bankers may need to fill the gaps with additional loans and cropping decisions might be affected (e.g., farmers shift to crops with lower input costs). As an alternative, farmers might make greater use of the marketing assistance loan program, which was reauthorized by the 2014 farm bill and is designed to help with farm cashflow by using crops as collateral for a loan.

### **“Actively Engaged” Rule**

To be eligible for payments, persons must be “actively engaged” in farming. Actively engaged, in general, is defined as making a significant contribution of (i) capital, equipment or land, and (ii) personal labor or active personal management. Also, profits are to be commensurate with the level of contributions, and contributions must be at risk. Legal entities can be actively engaged if members collectively contribute personal labor or active personal management. Special classes allow landowners to be considered actively engaged if they receive income based on the farm’s operating results, without providing labor or management. Both spouses are considered actively engaged if only one meets the qualification, allowing payment limits to be doubled.

The 2014 farm bill instructs USDA to write regulations that define “significant contribution of active personal management” to more clearly and objectively implement existing law. The regulation is to apply beginning with the 2015 crop year, and entities made solely of family members are to be exempt from the new regulation. This enacted provision differs from earlier Senate-passed and House-passed versions of the 2014 farm bill, which would have deleted “active personal management” and effectively required personal labor in the farming operation. Under the 2014 farm bill, USDA is required to consider different limits for varying types of farming operations, based on considerations of size, nature, and management requirements of different farming types; changes in the nature of active personal management due to advancements in farming practices; and the impact of this regulation on the long-term viability of farming operations.

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<sup>10</sup> For more information, see [http://www.fsa.usda.gov/programs-and-services/arcplc\\_program/index](http://www.fsa.usda.gov/programs-and-services/arcplc_program/index).

USDA issued a proposed rule in March 2015, and the comment period ended May 26, 2015. The proposed rule limits farm payments to individuals who may be designated as farm managers but are not actively engaged in farm management. Under the proposed rule, non-family joint ventures and general partnerships must document that their managers are making significant contributions to the farming operation, defined as 500 hours of substantial management work per year, or 25% of the critical management time necessary for the success of the farming operation. Issuance of the final rule is pending.<sup>11</sup>

## Implementing SCO and STAX for Upland Cotton

For a typical federal crop insurance policy, an indemnity is triggered when the farm yield (or revenue) is below the policy guarantee, and the size of the indemnity is determined in part by the amount of coverage purchased by the producer. As provided under the 2014 farm bill, and to help cover the deductible (out-of-pocket or “shallow” loss) absorbed by the farmer on the underlying policy, farmers can now purchase a second policy on the same acreage, called Supplemental Coverage Option (SCO). The SCO indemnity is triggered when there is a county-level loss in yield or revenue (not an individual farm loss). A similar policy was made available for upland cotton called Stacked Income Protection (STAX), which is a revenue-based, area-wide crop insurance policy that may be purchased as a stand-alone policy for primary coverage or purchased in tandem with an underlying policy.<sup>12</sup> Premiums are subsidized at 65% for SCO and 80% for STAX.

Beginning with the 2015 crop year, SCO is available in select counties for spring barley, corn, soybeans, wheat, sorghum, cotton, and rice.<sup>13</sup> Beginning with the 2016 crop year, USDA expects to make greater use of crop insurance data to expand SCO coverage into select counties for alfalfa seed, canola, cultivated wild rice, dry peas, forage production, grass seed, mint, oats, onions, and rye. SCO is also expected to be available in 2016 for almonds, apples, blueberries, grapes, peaches, potatoes, prunes, safflower, tomatoes, and walnuts. USDA plans to extend coverage in the 2017 crop year to grapefruit, lemons, mandarins/tangerines, oranges, and tangelos.

Farmers who normally purchase relatively low levels of coverage (which are more affordable) might be most attracted to SCO, as it could help cover a larger portion of the farmer’s out-of-pocket loss (deductible). Proponents argue that these farmers are usually in the higher risk areas and need additional assistance through SCO to deal with the additional risk. Critics argue that these policies provide an excessive amount of support for crops in risky areas or can indemnify producers when there is no farm loss. Separately, a concern for some farm policy makers is that because the policies are triggered by area-wide losses and not farm losses, farmers may not be adequately covered if they suffer a loss on their farm but there was not a sufficient loss at the county level to trigger an indemnity. These issues might capture the attention of policy makers after producers have some experience with these policies.

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<sup>11</sup> For more information, see [http://www.fsa.usda.gov/programs-and-services/payment-eligibility/actively\\_engaged/index](http://www.fsa.usda.gov/programs-and-services/payment-eligibility/actively_engaged/index).

<sup>12</sup> STAX was sought by U.S. cotton producers in an attempt to resolve a long-running trade dispute with Brazil that requires changing the U.S. cotton support program so it does not distort international markets.

<sup>13</sup> USDA, Risk Management Agency, *Supplemental Coverage Option for Federal Crop Insurance*, October 2014, <http://www.rma.usda.gov/news/currentissues/farmbill/2014NationalSupplementalCoverageOption.pdf>. See also CRS Report R43494, *Crop Insurance Provisions in the 2014 Farm Bill (P.L. 113-79)*.

## Actual Production History (APH) for Crop Insurance

In recent years, a particular crop insurance concern of producers affected by prolonged drought in the Southern Plains has been the inclusion of poor yields used to establish an individual's insurance guarantee, which is based on 4 to 10 years of historical farm yields and called actual production history (APH). To address this, the 2014 farm bill allows a producer to exclude years with low yields from his or her APH calculation when the average county yield is less than 50% of the 10-year county average. The farm bill manager's report directed USDA to implement the provision for 2015 crops. Given program complexity and significant data requirements, USDA first indicated that it would not do so until 2016, prompting some Members to press for an earlier rollout. On October 21, 2014, USDA announced it would implement the provision for crops planted in spring 2015 (but not wheat planted in fall 2014). Some Members had pushed for extending benefits retroactively to wheat planted in fall 2014, which USDA declined to do.

## Additional Crop Insurance Provisions

The 2014 farm bill enacted several provisions to address specific concerns for fruit and vegetable producers, including whole farm insurance. In November 2014, USDA announced the availability of a revised Whole-Farm Revenue Protection plan of insurance, which offers higher levels of coverage and other features designed to enhance the safety net for fruit and vegetable producers and others with limited availability of traditional federal crop insurance products. The 114<sup>th</sup> Congress is expected to monitor the experiences of these producers during 2015.

Members also will likely await the results of number of studies required by the farm bill to explore potential products for additional commodities. The 2014 farm bill directs FCIC to study a variety of topics that could lead to additional insurance policies for animal agriculture. FCIC is required to enter into contracts to conduct research and development on policies for the margin between the market value of catfish and input costs and poultry business interruption insurance for poultry growers, including losses due to bankruptcy of an integrator (owner-processor). FCIC also is required to contract for separate studies on insuring swine producers and poultry producers for a catastrophic event.

More information on other provisions in the 2014 farm bill is available in CRS Report R43494, *Crop Insurance Provisions in the 2014 Farm Bill (P.L. 113-79)*.

## Agricultural Disaster Payments

Given significant drought conditions in parts of the Great Plains in recent years, the Livestock Forage Program (LFP), as modified in the 2014 farm bill to provide retroactive payments for losses back to FY2012, has delivered to date the largest amount of farm safety net payments. Program payments totaled \$3.0 billion in FY2014 and are projected by CBO to total \$2.5 billion in FY2015. There is no program cap on LFP payments. Smaller amounts have been delivered to other disaster programs: the Livestock Indemnity Program (\$55 million in FY2015) and Tree Assistance Program (\$8 million in FY2015). For the Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish Program (ELAP), annual payments are capped at \$20 million, and individual farm payments for both FY2012 and FY2013 were adjusted downward in order for the total to fit under the cap. At the time of farm bill enactment, the CBO score for total disaster payments expected in FY2014 and FY2015 was \$1.3 billion.

With relatively large LFP outlays under the 2014 farm bill, Congress might be interested in the payment process for LFP. USDA's Office of Inspector General (OIG) reviewed the program under the 2008 farm bill, and in December 2014 found that the Farm Service Agency (FSA) had made

administrative errors when processing certain LFP applications, resulting in improper payments for some applications.<sup>14</sup> The OIG identified areas needing attention, including improved guidance for local FSA offices when calculating and making payments and improved internal reviews for producer eligibility and payment accuracy.

## Government Outlays and Policy Issues

With ongoing congressional concern for budget deficits and federal spending, the combined cost of farm programs, crop insurance, and disaster programs is expected to garner the attention of policy makers who want to reduce federal spending in the 114<sup>th</sup> Congress. Several additional aspects of the farm safety net might be examined, including “generic” base acres and crop insurance subsidies.

### Potential for Higher Farm Program Outlays

Record corn and soybean yields in 2014 have put downward pressure on farm prices, pushing government outlays for the farm commodity programs for 2014 crops above earlier expectations. In March 2015, CBO estimated the cost of PLC/ARC for FY2016 (associated with crops harvested in 2014) at \$4.0 billion, up from \$3.8 billion that was calculated in January 2014 based on stronger market assumptions. USDA expects even higher FY2016 outlays, estimated at \$7.3 billion. The five-year program costs could rise substantially as well, if the price of corn remains below \$4 per bushel through 2018. Corn generates the greatest outlays among program crops, and its price correlates with other crop prices. To offset the projected higher farm program costs, the Administration proposed in its FY2016 budget a reduction in crop insurance subsidies (see “Crop Insurance Subsidies” below).

Lower expected farm prices are significant for program outlays because the 2014 farm bill increased program payment triggers (reference prices) for covered commodities (see list in **Table 2**). The additional price protection will trigger payments (generating outlays) more quickly than under the 2008 farm bill, but farm programs were designed to provide financial cover for producers until crop prices rebound and incomes rise. Proponents of farm spending also point out that weak prices likely will have the opposite effect for federal crop insurance (i.e., reducing prospective outlays) because policy premiums (and the premium subsidy) typically decline in tandem with falling farm prices (lower prices means lower liability and premiums).

A broader policy concern is that prospective payments could help maintain overall crop production when low prices would otherwise discourage farmers from planting or applying additional inputs. Larger supplies could intensify the price pressure and further increase government costs. Several program features, however, are designed to minimize any adverse production effect. The first is that farm payments are made only on historical base acreage and not current year plantings (except for generic base—see below). In other words, farmers would receive the payment, if triggered by low prices or revenue, regardless of how much acreage is planted. Moreover, payment is made only on a portion of base (85% in the case of PLC and ARC-County and 65% for ARC-Individual). Finally, the ARC formula limits the potential production effects if farm prices were to remain low for several years. That is, the ARC guarantee declines as older, higher prices (from recent years) fall out of the five-year moving average guarantee, at least

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<sup>14</sup> USDA Office of Inspector General, *Farm Service Agency Livestock Forage Program*, Audit Report 03702-0001-32, December 2014, <http://www.usda.gov/oig/webdocs/03702-0001-32.pdf>.

until farm prices decline to the reference price, which serves as the minimum price in the ARC guarantee. In contrast, the PLC guarantee is the reference price, which remains fixed in statute.

The fixed nature of the reference prices has potential to lock in farm payments for an extended period of time if, for particular crops, the average farm price remains below the reference price. For example, the average farm price for peanuts is projected by CBO to average between \$0.2039 per pound and \$0.2150 per pound for crop years 2014-2018, compared with a reference price of \$0.2675 per pound. Farm program outlays for peanuts are expected to be triggered each year of the farm bill, with outlays projected by CBO to exceed \$200 million per year. USDA expects significantly higher peanut outlays.

### **“Generic” Base Acres**

As mentioned above, to reduce the potential for excess production and subsequent market distortions, the 2014 farm bill continues to “decouple” farm payments from actual plantings by instead making PLC/ARC payments on a farm’s historical “base acres.” Each farm has crop-specific bases equal to historical planted acreage on that farm. Also, as part of a package to address a long-term trade dispute, the 2014 farm bill excluded upland cotton from PLC/ARC and renamed upland cotton base (totaling 17.5 million acres) as “generic” base. Generic base becomes eligible for program payments if a covered crop is planted on the farm. Thus, generic base is an exception to the broad decoupling of plantings and farm program payments. (The precursor to ARC, called “ACRE,” also tied government payments to same-year plantings.)

The domestic and trade policy concern is that farmers with generic base might pursue potential farm program payments by planting certain covered crops in low-price years (see “WTO Trade Concerns” below). For example, producers with generic base might have an economic incentive to plant additional peanuts if the combination of expected payments and market returns is greater for peanuts than for alternative crops. For a discussion of potential planting incentives on generic base acres and associated government costs, see CRS Report R44156, *U.S. Peanut Program and Issues*. **Table A-3** contains an example of Price Loss Coverage (PLC) payments for peanuts, with generic base attributed to peanuts.

### **Crop Insurance Subsidies**

To offset higher farm program outlays given lower expected farm prices, the Administration’s FY2016 budget proposed two changes to the federal crop insurance program, which would reduce outlays by a combined \$16 billion over 10 years.<sup>15</sup> The first proposal would reduce premium subsidies by 10 percentage points for policies providing revenue protection with “harvest price coverage” (crops include wheat, corn, soybeans and others with guarantees set by USDA using the futures market). The current subsidy ranges between 38% and 80%, depending upon the coverage (deductible) purchased by the producer. The guarantee for this type of coverage increases if harvest-time price is higher than the initial guarantee established prior to planting. The Administration and others argue that such “up-side” price protection does not need to be subsidized by the government. The second proposal would change “prevented planting coverage,” which indemnifies producers when crops cannot be planted for weather reasons. The changes include adjusted payment rates and lower yield guarantees.

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<sup>15</sup> USDA, *FY2016 Budget Summary and Annual Performance Plan*, February 2015, <http://www.obpa.usda.gov/budsum/fy16budsum.pdf>.

Leaders of the House and Senate Agriculture Committees criticized the Administration's proposal. House Agriculture Committee Chairman Mike Conaway said the cuts "would jeopardize the ability of producers to insure their crops in a climate of collapsing crop prices, major crop losses, and falling farm income."<sup>16</sup> Senate Agriculture Committee Chairman Pat Roberts said the proposal "ignores the concerns of the nation's farmers and ranchers."<sup>17</sup>

For more information, see CRS Report R43951, *Proposals to Reduce Premium Subsidies for Federal Crop Insurance*.

## WTO Trade Concerns

The enacted 2014 farm bill (P.L. 113-79) could result in potential compliance issues for U.S. farm policy with the rules and spending limits for domestic support programs that the United States agreed to as part of the World Trade Organization's (WTO's) Uruguay Round Agreement on Agriculture. In general, the act's new farm safety net shifts support away from classification under the WTO's green/amber boxes and toward the blue/amber boxes, indicating a potentially more market-distorting U.S. farm policy regime. The most notable safety net change is the elimination of the \$5-billion-per-year direct payment program, which was decoupled from producer planting decisions and was notified as a minimally trade-distorting green box outlay. Direct payments were replaced by programs that are partially coupled (PLC and ARC) or fully coupled (SCO and STAX), meaning that they could potentially have a significant impact on producer planting decisions, depending on market conditions. Because the United States plays such a prominent role in most international markets for agricultural products, any distortion resulting from U.S. policy would be both visible and vulnerable to challenge under WTO rules. For more, see CRS Report R43817, *2014 Farm Bill Provisions and WTO Compliance*.

## Design of Overall Farm Safety Net

Challenges for farm policy makers over the years have included the complexity of the farm safety net, the development of programs with similar but not identical objectives and payment mechanisms, and the potential for different programs to make payments for the same loss.<sup>18</sup> For example, the current farm safety net for "covered" commodities has several variations of "counter-cyclical-style" payments, including marketing loan benefits, traditional price payments (PLC), and revenue payments (ARC-County Coverage). All three focus to some extent on price declines. Farmers can also add "revenue protection" crop insurance for individual farm yield (and revenue) risk, but without minimum prices used in farm programs. (See **Figure A-3** for the interaction of crop insurance and farm programs.) Proponents say the options are necessary because "one program doesn't fit all producers and regions," while others believe that a simplified approach might be more effective and less expensive, with savings used for purposes that generate broad societal gains, such as agricultural research or transportation infrastructure.

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<sup>16</sup> Mike Conaway, "Chairman Conaway Responds to President Obama's FY2016 Budget Proposal," press release, February 2, 2015, <http://agriculture.house.gov/press-release/chairman-conaway-responds-president-obama%E2%80%99s-FY2016-budget-proposal>.

<sup>17</sup> Senator Pat Roberts, "Senate Ag Committee Chairman Roberts Responds to President's Budget Proposal," press release, February 2, 2015, <http://www.ag.senate.gov/newsroom/press/release/senate-ag-committee-chairman-roberts-responds-to-presidents-budget-proposal>.

<sup>18</sup> For background and analysis on program overlap, see Erik J. O'Donoghue et al., *Identifying Overlap in the Farm Safety Net*, USDA Economic Research Service, Economic Information Bulletin Number 87, November 2011, [http://www.ers.usda.gov/media/149262/eib87\\_1\\_.pdf](http://www.ers.usda.gov/media/149262/eib87_1_.pdf).

## Appendix. Farm Commodity Program Examples

The 2014 farm bill (P.L. 113-79) established commodity programs that make farm payments when either annual crop prices or revenues are below statutory reference prices or historical revenue guarantees. Producers have a one-time choice:

- For each covered crop on each farm,
  - Price Loss Coverage (PLC), or
  - Agriculture Risk Coverage-County (ARC-CO)
- Or, for all covered crops on each farm,
  - Agriculture Risk Coverage-Individual (ARC-Individual)

PLC is illustrated in **Figure A-1** and ARC-CO is illustrated in **Figure A-2**.

Hypothetical numeric examples in the following tables illustrate several types of farms and how farm commodity programs might trigger payments given 2014 farm bill parameters.

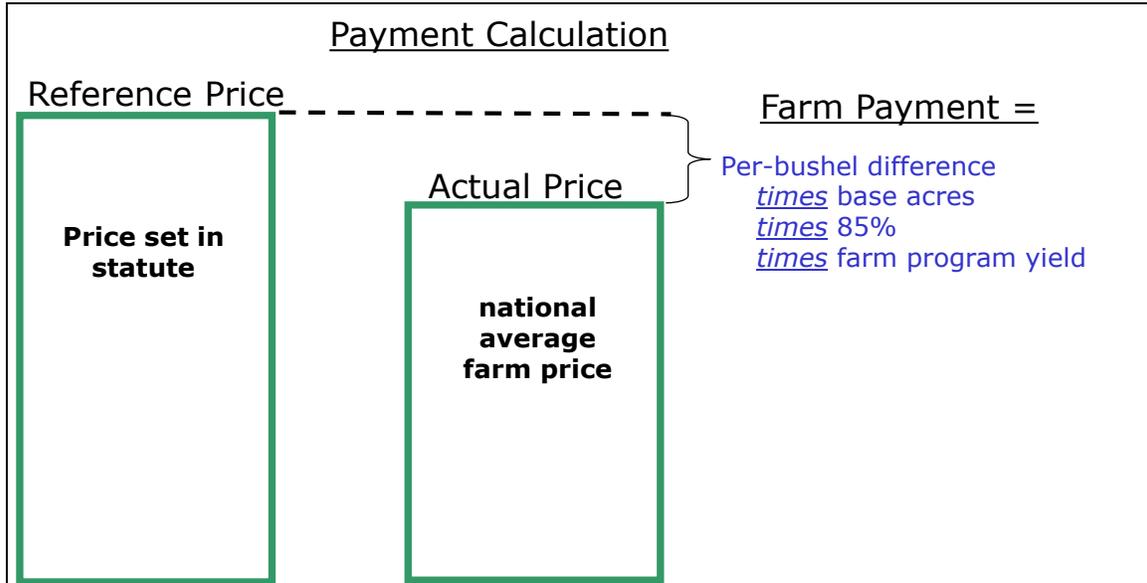
- **Table A-1:** Corn/Soybean farmer selects PLC for corn and ARC for soybeans
- **Table A-2:** Wheat/Lentil farmer selects ARC-Individual for the entire farm
- **Table A-3:** Peanut/Cotton farmer selects PLC for peanuts, with generic base (formerly upland cotton base) attributed to same-year peanut planted acreage

In addition to farm commodity programs, producers who purchase federally subsidized crop insurance may also be eligible for an indemnity if price and yield conditions specified in the policy are triggered. The 2014 farm bill made available a second federal crop insurance policy called the Supplemental Coverage Option (SCO) to cover part of the deductible on the underlying policy. (Note: SCO cannot be purchased for commodities enrolled in ARC.) For farm examples of crop insurance, see CRS Report R40532, *Federal Crop Insurance: Background*.

**Figure A-3** illustrates the interaction between crop insurance and farm programs. The bar on the left depicts the expected revenue (prior to planting) under a typical crop insurance revenue policy with a 30% deductible (the farmer absorbs the first 30% of the loss). If the farmer selects PLC, an SCO policy can be purchased to cover part of the deductible (see PLC column). If a farm loss occurs, an initial indemnity is triggered under the farmer's individual crop insurance policy (depicted by the green box). A second indemnity from SCO would be paid (blue box) if there is also a loss at the county level. Overall, the farmer incurs a loss of approximately 14% (white box at top). A *separate PLC payment* (not shown) is made if the farm price is below the reference price. In contrast, if ARC is selected rather than PLC (see ARC column), the farm is not eligible for SCO and only an ARC payment (red box) and insurance indemnity (green box) would be made if triggered.

**Figure A-1. Price Loss Coverage (PLC)**

(makes payment when national average farm price drops below the reference price)

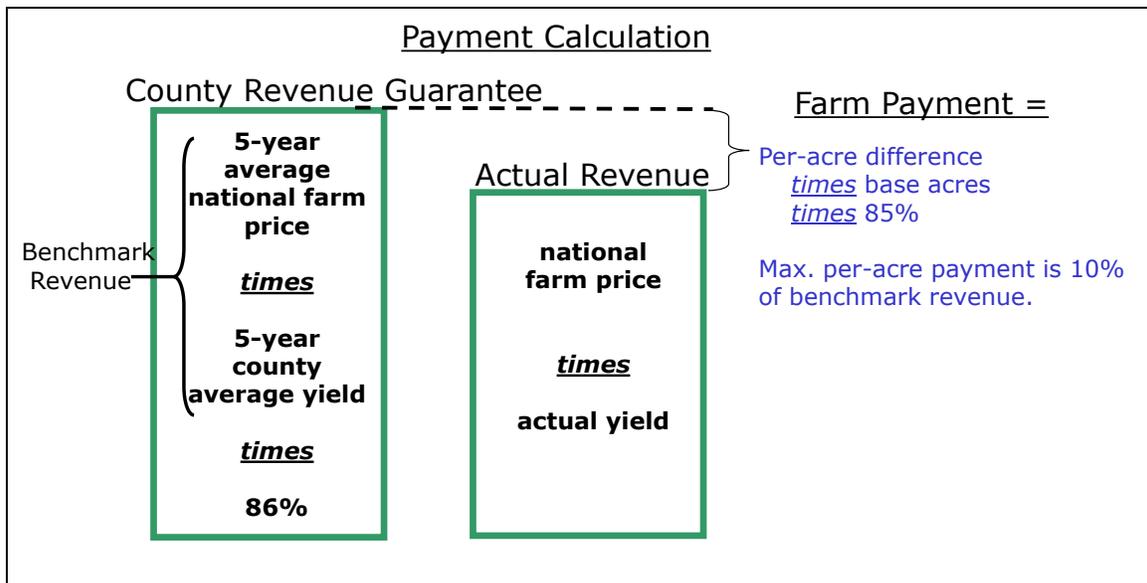


Source: CRS.

Notes: In a declining market, the per-bushel payment rate increases until the farm price drops below the loan rate. At this point, benefits under the Marketing Assistance Loan Program may become available.

**Figure A-2. Agriculture Risk Coverage (ARC)–County Coverage**

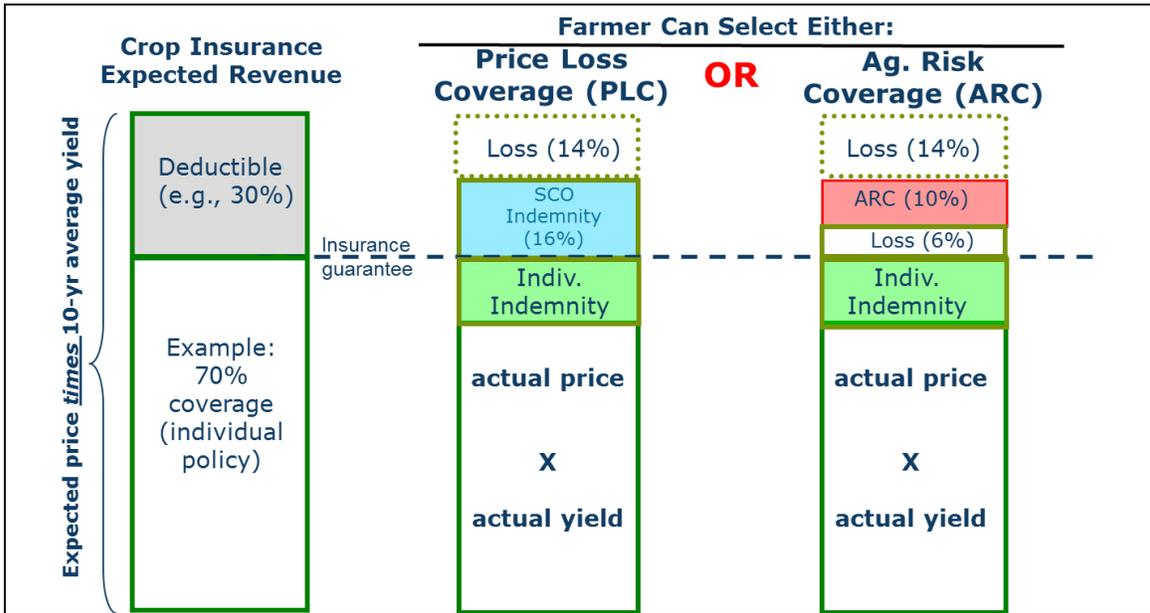
(payment when actual county-wide revenue drops below 86% of historical revenue [“shallow loss”])



Source: CRS.

Notes: Five-year averages exclude high and low years. Instead of an ARC county guarantee on a crop-by-crop basis, farmers can select a farm-level guarantee for all covered crops on a farm. Payment acreage is reduced to 65% of base acres, and a single, whole farm guarantee (and payment) is calculated as a weighted average for all crops (i.e., not on a crop-by-crop basis).

**Figure A-3. Crop Insurance and Farm Commodity Programs**



**Source:** CRS.

**Notes:** Does not show PLC payment, which is made when the average farm price is less than the reference prices set in the farm bill. Program selection deadline: March 31, 2015.

**Table A-1. Hypothetical Corn/Soybean Farm in 2014**

(farmer selects Price Loss Coverage (PLC) for corn and Ag. Risk Coverage (ARC) for soybeans)

Step 1.		Step 2.		Step 3.		Step 4.	
Data		Payment Formula		Calculation		Payment	
<b>Price Loss Coverage (PLC) for corn:</b> <i>payment occurs when actual farm price (\$3.40/bu.) is below reference price (\$3.70/bu.)</i>							
<b>Corn</b> Reference Price = \$3.70/bu. 2014 Actual Price = \$3.40/bu. Farm Base = 500 acres Farm Program Yield = 100 bu./acre		<b>Payment =</b> (Reference Price - Actual Price) x Base Acres x 85% acreage factor x Program Yield		<b>Payment =</b> (\$3.70/bu. - \$3.40/bu.) x 500 acres x 85% x 100 bushels/acre = \$12,750		<b>Corn payment =</b> \$12,750	
<b>Agriculture Risk Coverage – County (ARC) for soybeans:</b> <i>payment occurs when actual county revenue (\$/acre) is below guarantee</i>							
<b>Soybeans</b>		<b>Benchmark Revenue =</b>		<b>Average yield and price calculations</b>			
<b>County yield</b> bu./acre	<b>Nat'l price</b> per bu.	5-year "Olympic" average county yield x 5-year "Olympic" average national price  The "Olympic" averages exclude the high and the low years (in <i>italics</i> at left).		Average yield = (38 + 40 + 42) / 3 = 40 bu./acre Average price = (\$11.30 + \$12.50 + \$13.00) / 3 = \$12.27/bu. <b>Benchmark Revenue =</b> \$40 bu./acre x \$12.27/bu. = \$491/acre			
2009	36						
2010	38						
2011	40						
2012	42						
2013	44						
Data in <i>italics</i> are not used in calculation.							
		<b>Revenue Guarantee =</b> Benchmark Revenue x 86% guarantee factor		<b>Revenue Guarantee =</b> \$491/acre x 86% = \$422/acre			
2014 county yield = 40 bu./ac 2014 nat'l price = \$10.00 /bu.		<b>2014 Actual Revenue =</b> county yield x national price		<b>2014 Actual Revenue =</b> 40 bu./acre x \$10.00/bu. = \$400/acre			
Farm Base (soybeans) = 500 acres		<b>Payment =</b> (Revenue Guarantee - Actual Revenue) x Base Acres x 85% acreage factor		<b>Payment =</b> (\$422/acre - \$400/acre) x 500 acres x 85% = \$9,350		<b>Soybean payment =</b> \$9,350	
<b>Total farm payment = PLC for corn + ARC for soybeans</b>							<b>\$22,100</b>

**Source:** CRS, based on statutory provisions of P.L. 113-79, hypothetical data (county yields, farm program yields, and farm bases), and USDA crop prices (2014 "actual" prices are forecast as of October 10, 2014).

**Notes:** Statutory parameters include the reference price, the payment acreage factor (85%), and the guarantee factor for "shallow losses" (86%). Payments do not depend which crop is actually planted and are scheduled to be made in October 2015 after final 2014-crop price and yield data become available. In ARC, reference prices serve as minimums; maximum payment is 10% of the benchmark revenue. In both PLC and ARC, the loan rate is used if higher than actual price. Higher prices or yields might not trigger a farm payment for 2014 crops.

**Table A-2. Hypothetical Wheat/Lentil Farm in 2014**  
(farmer selects *Agriculture Risk Coverage-Individual* for entire farm—wheat and lentils)

Step 1.	Step 2.	Step 3.	Step 4.
Data	Payment Formula	Calculation	Payment
<b>Agriculture Risk Coverage – Individual (ARC):</b> <i>payment occurs when actual whole-farm revenue (\$/acre) is below whole-farm guarantee</i>			
2014 total plantings = 600 acres Wheat = 500 acres Lentils = 100 acres	<b>2014 Planting Shares:</b> <b>Wheat:</b> (2014 wheat plantings / 2014 total plantings) <b>Lentils:</b> (2014 lentil plantings / 2014 total plantings)	<b>2014 Planting Shares:</b> <b>Wheat:</b> 500 ac. / (500 ac. + 100 ac.) = 83% <b>Lentils:</b> 100 ac. / (500 ac. + 100 ac.) = 17%	
<b>Wheat</b> Farm yield x Nat'l price = Rev. bu./acre per bu. \$/ac. 2009 36 x \$5.50* = \$198 2010 38 x \$5.70 = \$217 2011 40 x \$7.24 = \$290 2012 42 x \$7.77 = \$326 2013 44 x \$6.87 = \$302	<b>Average Revenue Calculations:</b> The “Olympic” averages exclude the high and the low revenue years (in <i>italics</i> at left)	<b>Average Revenue Calculations:</b> <b>Wheat:</b> (\$217/ac. + \$290/ac. + \$302/ac.) / 3 = \$270/ac. <b>Lentils:</b> (\$334/ac. + \$275/ac. + \$312/ac.) / 3 = \$307/ac.	
<b>Lentils</b> Farm yield x Nat'l price = Rev. cwt./acre per cwt. \$/ac. 2009 14 x \$26.80 = \$375 2010 13 x \$25.70 = \$334 2011 11 x \$25.00 = \$275 2012 12 x \$20.70 = \$248 2013 15 x \$20.80 = \$312	<b>Benchmark Revenue =</b> 5-year “Olympic” average revenue for <b>wheat</b> x wheat 2014 planting share + 5-year “Olympic” average revenue for <b>lentils</b> x lentil 2014 planting share	<b>Benchmark Revenue =</b> <b>Wheat:</b> \$270/ac. x 83% = \$224/ac. <b>Lentils:</b> \$307/ac. x 17% = \$52/ac. <b>Total Benchmark revenue =</b> \$224/ac. + \$52/ac. = \$276/ac.	
Data in <i>italics</i> are not used in calculation; *reference price of \$5.50 serves as a minimum price for wheat.	<b>Revenue Guarantee =</b> Benchmark Revenue x 86% guarantee factor	<b>Revenue Guarantee =</b> \$276 / acre x 86% = \$ 237 / acre	
<b>2014 Actual Crop Revenue Data</b> Farm prod. x Nat'l price = Revenue Wheat: 18,000 bu. x \$5.90 = \$106,200 Lentils: 1,400 cwt. x \$19.00 = \$26,600	<b>2014 Actual Revenue =</b> Sum of crop revenues divided by total 2014 planted area	<b>2014 Actual Revenue =</b> (\$106,200 + \$26,600) / 600 acres = \$221/ac.	
Total Farm Base = 600 acres In this case, base acres = total planted acres	<b>Payment =</b> (Revenue Guar. - Actual Revenue) x Base Acres x 65% acreage factor	<b>Payment =</b> (\$237/acre - \$221/acre) x 600 acres x 65% = \$6,240	<b>Farm payment =</b> \$6,240
<b>Total farm payment</b>			\$6,240

**Source:** CRS, based on statutory provisions of P.L. 113-79, hypothetical data (acreage and yields), and USDA crop prices (2014 “actual” prices are forecast as of October 10, 2014).

**Notes:** Statutory parameters include the reference price, the guarantee (“shallow loss”) factor (86%), and the payment acreage factor (65%). Payments are scheduled to be made in October 2015 after final 2014-crop price and yield data become available. Reference prices serve as minimums; maximum payment is 10% of benchmark revenue. Higher actual prices or yields might not trigger farm payment for 2014 crops.

**Table A-3. Hypothetical Peanut/Cotton Farm in 2014**

(farmer selects *Price Loss Coverage (PLC)* for peanuts, with *Generic Base* attributed to peanuts)

Step 1.	Step 2.	Step 3.	Step 4.
Data	Payment Formula	Calculation	Payment
<b>Price Loss Coverage (PLC) for peanuts:</b> <i>payment occurs when actual farm price (\$400/ton) is below reference price (\$535/ton)</i>			
Reference Price = \$535/ton 2014 Actual Price = \$400/ton Peanut Base = 200 acres Farm Program Yield = 1.5 tons/acre 2014 Total Plantings = 300 acres of peanuts Note: payments do not depend on same-year plantings.	<b>Payment =</b> (Reference Price – Actual Price) x Base Acres x 85% acreage factor x Program Yield	<b>Peanut Payment =</b> (\$535/ton - \$400/ton) x 200 acres x 85% x 1.5 ton/acre = \$34,425	<b>Peanut payment =</b> \$34,425
Generic Base = 100 acres (formerly Upland Cotton Base) Note: payments on Generic Base depend on same-year plantings of covered crops.	For plantings on Generic Base: Payment = same formula as above but Generic Base acres are attributed to a particular covered commodity in proportion to actual plantings for that crop year. In this case, all Generic Base (100 acres) are attributed to peanuts because no other covered commodity was planted in 2014.	Payment on Generic Base = (\$535/ton - \$400/ton) x 100 acres x 85% x 1.5 ton/acre = \$17,213	<b>Payment on Generic Base =</b> \$17,213
<b>Total farm payment = PLC for peanuts + PLC for Generic Base (planted/attributed to peanuts)</b>			<b>\$51,638</b>

**Source:** CRS, based on statutory provisions of P.L. 113-79, hypothetical data (acreage and yields), and USDA crop prices (2014 “actual” prices are forecast as of October 10, 2014).

**Notes:** Statutory parameters include the reference price and the payment acreage factor (85%). For each crop year, generic base acres are attributed to (i.e., temporarily designated as) base acres to a particular covered commodity base in proportion to that covered crop’s share of total plantings of all covered commodities in that year. The loan rate is used in the payment calculation if it is higher than the actual price.

Upland cotton is no longer a covered commodity and not eligible for PLC/ARC payments (marketing assistance loans remain available). Instead it is eligible for a new crop insurance policy called Stacked Income Protection or STAX (see CRS Report R43494, *Crop Insurance Provisions in the 2014 Farm Bill (P.L. 113-79)*). Transition payments are made for upland cotton for the 2014 crop year, and for 2015 if STAX is not available.

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