



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

AGRICULTURAL ACT OF 2014, FACT SHEET 6 UPDATED

Agriculture Risk Coverage: ARC-Individual (ARC-IC)

Kent Olson, Applied Economics, January 2015

The “Agricultural Act of 2014,” commonly called the farm bill, creates the Agriculture Risk Coverage - individual farm coverage (ARC-IC) program which is described below. Other fact sheets in the series describe other parts of the bill.

If ARC-IC is elected, no covered commodity on the farm is eligible for the Supplemental Coverage Option (SCO) under the crop insurance options in the farm bill.



AGRICULTURE RISK COVERAGE – INDIVIDUAL FARM COVERAGE (ARC-IC)

Under ARC-IC coverage, a payment is made if the actual revenue from all covered commodities is less than the ARC-IC guarantee.

The actual revenue for each year is determined by the farm’s yield multiplied by the maximum of the national marketing year price and the crop’s loan rate (set in the farm bill), summed over all covered commodities and divided by the farm’s planted acreage that year.

The ARC-IC guarantee is 86% of the ARC-IC benchmark revenue. The ARC-IC benchmark revenue is the most recent 5-year Olympic-average of the revenue from all covered commodities weighted by the ratio of the acreage planted to a covered commodity and the total acreage of all covered commodities. The revenue for each year is determined by

Table 1: Reference Prices (\$); set in 2014 Farm Bill.

WHEAT	5.50/bu	SOYBEANS	8.40/bu
CORN	3.70/bu	OTHER OILSEEDS	20.15/cwt
GRAIN SORGHUM	3.95/bu	PEANUTS	535/ton
BARLEY	4.95/bu	DRY PEAS	11/cwt
OATS	2.40/bu	LENTILS	19.97/cwt
LONG GRAIN RICE	14/cwt	SMALL CHICKPEAS	19.04/cwt
MED. GRAIN RICE	14/cwt	LARGE CHECKPEAS	21.54/cwt

the farm’s yield multiplied by the maximum of the national marketing year price and the crop’s reference price (Table 1).

The ARC-IC payment rate per acre is the difference between the ARC-IC guarantee and the ARC-IC actual revenue, but the payment rate cannot exceed 10% of the ARC-IC benchmark revenue.

The total payment for a farm is the ARC-IC payment rate for that farm times 65% of the farm’s total base acres (compared to 85% for ARC-CO based coverage).



For an example, let's start with determining the ARC-IC benchmark revenue and guarantee. We start with calculating the revenue for each crop in each of the five most recent years. The revenue for each year is determined by the individual farm's yield multiplied by the maximum of the national marketing year price and the crop's reference price.

The 5-year Olympic average revenue for each crop is then calculated ignoring the highest and lowest revenues in these five years. For this example farm, the 5-year Olympic average revenues are calculated to be \$954 for corn and \$570 for soybeans (as shown in Table 2 below).

The ARC-IC benchmark revenue is the most recent 5-year Olympic average revenue from each covered commodity on the farm weighted by the ratio of the acreage planted to that covered commodity and the total acreage of all covered commodities.

In this example, the farm has a total of 585 base acres and planted 350 acres of corn and 235 acres of soybeans, the ratio for corn is 0.6 and 0.4 for soybeans. The benchmark revenue for the farm is then the sum of the 5-year Olympic average of the revenue multiplied by each crop's weight or ratio.

As shown in Table 2, the benchmark revenue is \$800 which is the 5-year Olympic average revenue for corn (\$954) multiplied by the weight for corn (0.6) plus the 5-year Olympic average revenue for soybeans (\$570) multiplied by the weight for soybeans (0.4).

The ARC-IC guarantee is \$688 in this example which is 86% of the ARC-IC benchmark revenue.



Under ARC-IC coverage, a payment is made if the actual revenue from all covered commodities is less than the ARC-IC guarantee.

The actual revenue for each year is determined by the farm's yield multiplied by the maximum of the national marketing year price and the crop's loan rate, summed over all covered commodities and divided by the farm's planted acreage that year. For this example farm, the actual revenue is estimated to be \$578 per acre (as shown in Table 3 below).

In this example, the estimated actual revenue of \$578 is less than the ARC-IC guarantee of \$688 so a payment is triggered.

The ARC-IC payment rate per acre is the difference between the ARC-IC guarantee and the ARC-IC actual revenue. In this example, the difference is \$110 (=688-578) per acre. The payment rate cannot exceed 10% of the ARC-IC benchmark revenue which is \$80 in this example. So the ARC-IC payment rate in this example is \$80.

Under the ARC individual farm coverage program, the payment for a farm is the ARC-IC payment rate for that farm multiplied by 65% of the farm's total base acres (compared to 85% for the county based coverage). Thus, in this example the ARC-IC payment is \$30,420.

$$\$30,420 = 80 \times (0.65 \times 585)$$

Table 2: ARC-IC: Example Calculation of Benchmark Revenue and Guarantee.

CORN				SOYBEAN			
YEAR	YIELD	MYA PRICE	REVENUE	YEAR	YIELD	MYA PRICE	REVENUE
2009	195.0	3.70*	722	2009	50.5	9.59	484
2010	184.7	5.18	957	2010	42.6	11.30	481
2011	178.0	6.22	1,107	2011	49.5	12.50	619
2012	154.0	6.89	1,061	2012	46.4	14.40	668
2013	189.5	4.46	845	2013	46.8	13.00	608
5-YEAR OLYMPIC AVERAGE REVENUE			\$954				\$570
BENCHMARK REVENUE	IF THE EXAMPLE FARM HAS 585 BASE ACRES PLANTED 350 CORN AND 235 SOYBEANS: \$800 = (954 X 0.6) + (570 X 0.4)						
GUARANTEE	\$688 = 800 X 0.86						
*The 2009 MYA price of \$3.55 for corn is replaced by the higher reference price of \$3.70 following the rules in the 2014 farm bill.							

Table 3: ARC-IC: Example calculation of actual revenue for current year.

COMMODITY	PLANTED ACRES	FARM YIELD*	CURRENT MYA PRICE**	CROP REVENUE PER ACRE
CORN	350	192	3.40	653
SOYBEAN	235	47	9.95	468
WEIGHTED ACTUAL REVENUE FOR WHOLE FARM	\$578 = (653 X 0.6) + (468 X 0.4)			
*ESTIMATED				
**ESTIMATED FOR THIS EXAMPLE. FINAL DETERMINATION OF MYA PRICES FOR THE 2014 CROP YEAR WILL BE MADE AFTER THE END OF THE MARKETING YEAR.				

For more information: extension.umn.edu/agriculture/business/farm-bill