

Income Protection (IP) Insurance

Kenneth Stokes, G.A. "Art" Barnaby, Mark Waller and Joe Outlaw*

The Income Protection (IP) program insures the producer against lost income from reductions in yield or price. This policy pays when the harvested and appraised production to count, multiplied by the harvest price, are below the IP guarantee.

The IP plan uses the Multiple Peril Crop Insurance (MPCI) policy for yields, loss adjustments, and other underwriting procedures. IP prices are based on the average of the daily futures market closing prices for the insured crop prior to the sales closing date and during harvest. IP uses the Group Risk Plan's (GRP) county yield index to adjust IP premium rates. The insurance is provided for an enterprise unit that includes all acreage of the insured crop in the county in which the insured has an interest. By combining MPCI and GRP components, IP forms a straightforward product for the protection of a percentage of revenue.

Crop Coverage:

IP is a pilot crop insurance program available only for grain sorghum in all Texas counties and wheat in selected Kansas counties.

How IP Works?

The IP dollar guarantee per acre is calculated by multiplying the approved APH yield times the projected price times the selected coverage level. The approved APH yield is calculated at the enterprise level (all acreage of the crop in the county) using APH rules. The projected price is determined from the commodity futures market contract prior to planting (as defined in the insurance policy). Coverage levels range from 50 to 75 percent for the IP policy.

Producers may elect the catastrophic protection level and pay no premium, only the \$60 administrative fee. For 1999 and subsequent crop years, catastrophic risk protection equals 27.5 percent of the approved yield times 100 percent of the projected price.

An insured's total guaranteed dollar amount of protection is the net acres of the insured crop (acres times share) in the county multiplied by the IP dollar guarantee per acre. Indemnities are due when the insured's share of production Risk Management Education to count (harvested and appraised yields), multiplied by the harvest

price (as defined in the insurance policy), is less than the IP guarantee. If the yield loss is offset by a price increase, or vice versa, no indemnity payment is made.

IP Projected and Harvest Prices

IP's projected price and harvest price for grain sorghum are 90 percent of the average of the daily futures market closing prices (Chicago Board of Trade) for corn contracts for a month prior to planting and harvest, respectively. The actual CBOT contract and the projected and harvest price period depends upon the county's sales closing date.

^{*}Professor and Extension Economist, The Texas A&M University System; Extension Agricultural Economist, Kansas State University Agricultural Experiment Station and Cooperative Extension Service; Professor and Extension Economist, The Texas A&M University System; Assistant Professor and Extension Economist, The Texas A&M University System.

Sales closing date	CBOT corn futures contract	Projected price period	Harvest price period
January 15	September	December	Aug 15 - Sept 14
February 15	September	January	Aug 15 - Sept 14
March 15	December	February	November

EXAMPLE 1: Harvest price is higher than the projected price, with a 57 percent production loss

Approved APH yield = 70 bushels per acre

Coverage level = 65%Share = 100%

Projected price = \$2.20 per bushel
Harvest price = \$3.00 per bushel
Production to count = 30 bushels per acre
Crop value = Production to count x
harvest price = \$90.00

Revenue guarantee = Approved APH yield x coverage level x

projected price x share = \$100.10

Revenue guarantee (\$100.10) - crop value (\$90.00) = IP indemnity (\$10.10)

In example 1, the large yield loss is partially offset by the increased price at harvest. The resulting crop value of \$90 is still less than the revenue guarantee by \$10.10, so an indemnity payment is made to the producers.

EXAMPLE 2: Harvest price is lower than the projected price, with a 34 percent production loss

Approved APH yield = 70 bushels per acre

Coverage level = 65%Share = 100%

Projected price = \$2.20 per bushel

Harvest price = \$1.35 per bushel

Production to count = 46 bushels per acre

Crop value = Production to count x harvest price = \$62.10

Revenue guarantee = Approved APH yield x coverage level x

x coverage level x projected price x

share = \$100.10

Revenue guarantee (\$100.10) - Crop value (62.10) = IP indemnity (\$38.00)

In example 2, a large drop in price combines with a small production loss to produce a calculated crop value of \$62.10 and an IP indemnity payment of \$38 per acre.

Excluded Events

Exclusions are the same as for the MPCI policy. Coverage is not available for high-risk land.

Rating and Producer Subsidy

The rating method for the Income Protection program reflects historic yield variation and variation in gross income caused by yield and price movements during the crop year. The rating model includes the correlation of national prices and county yields. Income Protection premium rates are based upon the individual yield data reported, the relationship of each of those yields to the county average for that year, and the projected price level.

Policyholders selecting coverage of 65 percent or more will receive a premium subsidy equal to 75 percent of the premium for the 50 percent Income Protection coverage. Insureds selecting less than 65 percent coverage will receive a subsidy equal to 60 percent of the premium for 50 percent coverage. Because the subsidy is based on the value of the 50 percent Income Protection premium, individual premium subsidies may be more or less than would be paid for APH. On the average, the premium subsidy is expected to be about the same as for APH.

Important Facts

Farmers have accepted the Crop Revenue Coverage (CRC) concept more than the Income Protection plan. The IP plan guarantees revenues, as opposed to the yields backed by the CAT and MPCI. However, IP contains no feature for increasing revenue coverage if prices increase, nor does it have provisions for basic or optional units. These features make IP cheaper than CRC, but mean that it is more difficult to use the insurance to protect forward contracts. One reason for the lower premium is the assumption of a negative price yield correlation, which, if perfectly negatively correlated, would mean there would never be a claim under IP. Only when the yield reaches zero does the IP plan outperform MPCI under these conditions.

Partial funding support has been provided by the Texas Wheat Producers Board, Texas Corn Producers Board, and the Texas Farm Bureau.

Produced by AgriLife Communications and Marketing, The Texas A&M University System Extension publications can be found on the Web at: http://AgriLifeBookstore.org.

Visit Texas AgriLife Extension Service at http://AgriLifeExtension.tamu.edu.

Educational programs of the Texas AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Chester P. Fehlis, Deputy Director, Texas Agricultural Extension Service, The Texas A&M University System.

1.5M, Reprint ECO