B R I E F I N G

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Federal Crop and Crop Revenue Insurance Programs: Income Protection

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Objective
Analysis
for Informed
Decision Making

Federal crop insurance against individual farm yield losses in the form of multiple peril contracts has been available for some crops since 1938. Following the 1980 Federal Crop Insurance Act, the number of crops and the geographic coverage of the federal crop yield loss insurance program was greatly expanded. Beginning in the late 1980s, in addition to traditional multiple peril contracts, new policies were developed based on yield losses at the county level and offered for a limited number of crops in a limited number of counties.

Following the 1994 Crop Insurance Reform Act, a wider range of federally subsidized insurance contracts were introduced that provided protection against revenue losses and catastrophic losses.

Today, producers face a wide array of crop insurance alternatives including yield based Actual Production History (APH) insurance contracts and Revenue Insurance contracts. Not all insurance contracts are available for every crop in any given county. In some counties, Risk Management Agency (RMA) approved insurance contracts are not available for some crops. In these circumstances, producers can either utilize the Noninsured Disaster Assistance Program (NAP) or make a request for actuarial change.

Yield based APH insurance contracts include Multiple Peril Crop Insurance (MPCI) and Group Risk Plan (GRP) contracts. Under MPCI contracts, indemnity payments are triggered by low yields on an individual producer's insured acres. Under GRP contracts, indemnity payments are triggered by low county-wide yields.

Revenue insurance contracts that provide indemnities for revenue losses caused by either low yields, low prices, or include Group Revenue Insurance Policy (GRIP) contracts, Crop Revenue Coverage Contracts (CRC), Revenue Assurance (RA) contracts, and Income Protection (IP) contracts. Under CRC, RA, and IP revenue insurance contracts, indemnities are triggered by low revenues for an individual producer (caused either by low yields, or low prices, or both). Under GRIP contracts, indemnity payments are triggered by low average revenue for the crop in the country.

This briefing paper describes and discusses Income Protection (IP) contracts.

Income Protection

Income Protection (IP) contracts were developed collaboratively under a mandate provided by section 508(h)(6) of the 1994 Federal Crop Insurance Act to the FCIC to offer a cost of production insurance plan. A pilot IP program was introduced for the 1996 crop year.

The IP contract provides protection against reductions in expected revenues by paying for losses below the individual producer's revenue guarantee for the crop. The revenue guarantee is based on the producer's expected yield and the projected price at time of planting.

Currently IP insurance contracts are available only for a limited number of crops in a limited number of counties. In the 2000 crop year, these crops include barley, corn, cotton, grain sorghum, soybeans, spring wheat, and winter wheat.

Insurable Areas:

A producer must insure all acres of a crop in a county in which they have an interest under the same IP contract; that is, they must insure their enterprise unit for the crop. A producer cannot insure separate optional or basic units under separate IP contracts. In this respect, IP contracts are different than other crop yield and revenue insurance contracts that base

indemnities on individual producer yields and revenues (that is, MPCI, CRC, and RA contracts).

APH Approved Average Yield

The producer must establish an APH approved average yield for all acres planted to the crop in the county (See Briefing No. 6 for a detailed description of APH approved yields).

Yield Elections or Yield Coverage Levels

The producer elects the proportion of the APH approved average yield on each insurable unit against which insurance is to be purchased. Producers can generally select between 50 percent and 75 percent of their APH approved yield as the basis for their IP revenue insurance and yield elections can be specified in 5 percentage point increments. In some counties, producer can elect up to 85 percent of their APH approved yield.

The Basic Income Protection Guarantee and the Projected Harvest Price

The producer selects a yield election. The yield election is multiplied by the producer's APH approved average yield. This quantity is then multiplied by the projected harvest price for the crop (which is similar to the base price that determines the minimum revenue guarantee in the CRC revenue insurance contract).

The projected price for the crop is a specified average futures contract settlement price for harvest time delivery of the crop during a specified period prior to the contract signing date called the projected price discovery period. Typically, the projected price for the crop is determined between seven months and thirteen months prior to the futures contract settlement date, depending on the sign up date for the IP contract.

For example, in 2000, for corn with a March 15 sales closing date, the IP projected price was the Chicago Board of Trade February average settlement price for November corn futures contracts (that is, corn futures contracts expiring ten months later in November, 2000).

The IP income protection guarantee is equal to the APH approved yield multiplied by the yield election and the projected harvest price for the crop.

Example:

The producer has an APH approved yield of 100 bushels an acre. The producer selects an IP yield election of 70 percent. The projected harvest price for the crop is $2.50 a bushel. The producer's IP revenue guarantee is:

IP Revenue Guarantee = APH approved yield x Yield election x Projected harvest price = (100 bushels per acre) x (70 percent) x ($2.50) = $175 per acre .

The FCIC Harvest Price

Under an IP contract, the price at which the producer's crop is valued to assess losses is the FCIC harvest price. The harvest price for the crop is the average futures contract settlement price for the futures contract initially used to establish the projected price in the month prior to the expiration of that futures contract.

For example, in 2000, for corn the FCIC harvest price was the average November settlement price for the Chicago Board of Trade December corn futures contracts (that is, corn futures contracts expiring one month later in November, 2000).

Calculating IP Indemnity Payments

The producer's crop value for IP insurance purposes is measured as the producer's actual yield for the crop multiplied by the FCIC harvest price (not the price that the producer can sell the crop to a local county elevator at harvest time). If the measured crop value is less than the producer's IP revenue guarantee then the producer receives an indemnity equal the difference between the revenue guarantee and the crop value. If the producer's measured crop revenue exceeds the revenue guarantee then the producer receive no indemnity.

Example (continued):

The producer purchases an IP insurance contract at the 70 percent yield election. The producer's actual yield is 50 bushels (50 percent of the APH approved yield of 100 bushels), the per bushel base price is $2.50, and the per bushel harvest price is $3.00.

Crop Value = Actual yield x Harvest price = 50 bushels per acre x $3 per bushel = $150 per acre

The revenue guarantee ($175) is greater than the measured crop value. The producer receives the following indemnity payment on each insured acre:

Indemnity Payment = IP Revenue Guarantee - Crop Value = ($175 - $150) per acre = $25 per acre

In this example, the producer receives a lower indemnity from the IP contract than the producer would have obtained from an MPCI contract with the same yield election and projected price. This is because the harvest price exceeded the projected price. If the harvest price had been lower than the projected price, the producer's indemnity would have been greater than under a similar MPCI contract.

In comparing IP contracts with MPCI contracts, the producer should consider not only the likely structure of indemnity payments but also the premium payments associated with each contract. In general, in evaluating any alternative revenue and yield insurance contracts, producers should compare the protection against the risk of loss provided by each contract with the cost of each contract (the premium payment).

Premium Rates and Premium Payments

Premium rates for IP contracts are developed for each county and quoted to individual producers for each contract option. Producers may also select a Catastrophic Risk Protection (CAT) contract. In that case, producers are simply charged a $60 administrative fee for each crop which may be waived if they are limited resource producers.

Premium Subsidies

The premium rates charged to producers for all federal crop yield and revenue insurance contracts are lower than the premium rates that would be charged if producer premium

payments were required to cover all expected indemnity payments for crop and revenue premium subsidies generally do not increase in proportion to yield elections. Producers insuring against revenue losses with lower yield elections typically receive subsidies that make up a larger share of their total premium payments than producers insuring against crop losses with higher yield elections.

Shares

Individuals may not have 100 percent ownership shares in the crop. Each individual with a share in the crop may insure their own share. Indemnity payments for losses and premium payments are pro-rated by the individual's share.

Example (continued):

Assume the producer has a 50 percent share in the crop. The producer can now only receive 50 percent of any indemnity payment based on a 100 percent share, but only has to pay 50 percent of the premium payments based on a 100 percent share.

Prevented Planting and Replanting Indemnity Payments

In some years, producers may need to replant a crop or be prevented from planting a crop. In some circumstances, producers may be indemnified for replanting costs under an IP contract. Unless limited by the provisions of the policy, indemnity payments will also be made when producers are prevented from planting during the planting dates prescribed in the contract because of causes covered by the insurance contract (such as severe weather or flooding).

Sign Up Dates

FCIC identifies unique dates by which producers must sign up for their IP contracts that are specific to each county for each crop.

Reporting of Acreage and Crop Damage

Each crop year, producers with IP contracts are required to submit an acreage report by unit for each insured crop. The acreage report must be signed and submitted by the producer on or before the acreage reporting date contained in the Special Provisions for the county for the insured crop. In the event of crop damage, producers should immediately notify their insurance provider of the damage.

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