Agricultural Marketing Policy Center MSU - Bozeman

BRIEFING

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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 policies 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 policies, 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 policies 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 policies and Revenue Insurance policies. Not all insurance policies are available for every crop in any given county. In some counties, Risk Management Agency (RMA) approved insurance policies 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 insurance policies include Multiple Peril Crop Insurance (MPCI) and Group Risk Plan (GRP) policies. Under MPCI policies, indemnity payments are triggered by low yields on an individual producer's insured acres. Under GRP policies, indemnity payments are triggered by low county-wide yields.

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

This Briefing describes and discusses Income Protection (IP) policies.

Income Protection

Income Protection (IP) policies 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 policy provides protection against reductions in expected revenues by paying for losses below an individual producer's revenue guarantee for the crop. The APH yield is based on a producer's expected yield and the projected price at time of planting.

Currently IP insurance policies are available only for a limited number of crops in a limited number of counties. For the 2004 crop year, these crops include barley, corn, cotton, grain sorghum, soybeans, spring wheat, and winter wheat.

Insurable Units:

A producer must insure all acres of a crop in a county in which they have an interest under the same IP unit. A producer cannot insure separate optional or basic units using separate yield histories. In this respect, IP policies are different than other crop yield and revenue insurance policies that base indemnities on individual producer yields and revenues (that is, MPCI, CRC, and RA policies).

APH Approved Average Yield

A producer must establish an APH approved yield for all acres planted to the crop in the county (See Briefing No. 6, revised November 2002, for a detailed description of APH approved yields).

Coverage Levels

A producer elects the percentage of their APH yield 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 coverage levels can be specified in 5 percentage point increments. In some counties, producers can select up to 85 percent of their APH yield.

Income Protection Guarantee and Projected Harvest Price

A producer selects a coverage level. The coverage level is multiplied by the producer's APH yield. This quantity is then multiplied by the projected harvest price for the crop as established by the FCIC.

The projected price for the crop is a specified average futures settlement price for harvest time delivery of the crop during a specified period prior to the sales closing 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 settlement date, depending on the sign up date for IP policies.

For example, in 2004, 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 policies (that is, corn futures policies expiring ten months later in November, 2004).

The IP income protection guarantee is equal to the producer's APH yield multiplied by the coverage level and the projected harvest price for the crop.

<u>Example:</u>

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

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

The FCIC Harvest Price

Under an IP policy, the price at which a producer's crop is valued to assess losses is the FCIC harvest price. The harvest price for the crop is the average futures 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 2041, for corn the FCIC harvest price was the average November settlement price for the Chicago Board of Trade December corn futures policies (that is, corn futures policies expiring one month later in November, 2004).

Calculating IP Indemnity Payments

A producer's crop value for IP insurance purposes is defined 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 to the difference between the revenue guarantee and the crop value. If the producer's measured crop revenue exceeds the revenue guarantee then the producer receives no indemnity.

<u>Example (continued):</u>

A producer purchases an IP insurance policy at the 70 percent coverage level. The producer's actual yield is 50 bushels (50 percent of the producer's APH yield of 100 bushels), the projected harvest price is $2.50 per bushel, and the harvest price is $3.00 per bushel.

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 policy than the producer would have obtained from an MPCI policy with the same coverage level and projected harvest price. This is because the FCIC harvest price exceeded the FCIC projected price. If the FCIC harvest price had been lower than the projected price, the producer's indemnity would have been greater than under a similar MPCI policy.

When comparing IP policies with MPCI policies, a producer should consider not only the likely site of indemnity payments, but also the premium payments associated with each policy. Producers should always compare the insurance protection against the risk of loss provided by each policy with the cost of each policy (the premium payment).

Premium Rates and Premium Payments

Premium rates for IP policies are developed for each county and quoted to individual producers for each policy option. Producers may also select a Catastrophic Risk Protection (CAT) policy. In that case, producers are simply charged a $100 administrative fee for each crop which may be waived if they are limited resource producers.

Premium Subsidies

Premium rates charged to producers for all federal crop yield and revenue insurance policies are lower than the premium rates that would be charged if producer premium payments covered all expected indemnity payments. Premium subsidies generally do not increase in proportion to coverage levels. Producers insuring against revenue losses with lower coverage levels typically receive subsidies that make up a larger share of their total premium payments than producers insuring against crop losses with higher coverage levels.

Crop Shares

A producer often shares a portion of a crop with a landlord. Each individual with a share in a crop may insure their own share. Indemnity payments for losses and premium payments are pro-rated by the individual's share.

Example (continued):

Assume a producer has a 67 percent share in the crop. The producer can now only receive 67 percent of any indemnity payment. However, the producer only has to pay 67 percent of the premium.

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 policy.

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 policy because of causes covered by the insurance policy (such as severe weather or flooding).

Sign Up Dates

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

Reporting of Acreage and Crop Damage

Each crop year, producers with IP policies 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.