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B R I E F I N G

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Federal Crop and Crop Revenue Insurance Programs: Multiple Peril Crop Insurance (MPCI) and Catastrophic Coverage Policies

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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 APH 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, or low prices, or both). Under GRIP policies, indemnity payments are triggered by low average revenue for the crop in the country.

This Briefing describes and discusses Multiple Peril Crop Insurance (MPCI) policies.

Multiple Peril Crop Insurance (MPCI)

Producers of several major crops such as wheat have long been able to utilize federal MPCI policies to insure against yield losses. Beginning in 1980, the scope of the MPCI program was greatly expanded both in terms of numbers of crops and numbers of counties in which MPCI policies were available. As a result, most producers are more familiar with MPCI policies than other more recent federal crop insurance options. The key elements of an MPCI policy are as follows.

Insurable Units:

A producer may purchase a MPCI policy for optional units, or combine optional units and insure basic units, or, if available, combine basic units into an enterprise unit which includes all acreage planted to the crop in the same county (See Briefing No. 6, revised October 2003, for a detailed discussion of optional, basic and enterprise units).

APH Approved Average Yield

For each insured unit (optional, basic or enterprise), the producer must establish an APH approved average yield (See Briefing No. 7, revised November 2002, for a detailed description of APH approved yields).

Yield Elections

A producer elects the percentage of the APH yield on each insurable unit against which insurance is to be purchased. Producers can insure between 50 percent and 75 percent of their APH yield for most crops in most counties, although for some crops in some areas up to 85 percent of the APH yield can be insured.

Yield Guarantees

The yield guarantee is the producer's APH yield multiplied by the producer's yield election. If the actual yield falls below the yield guarantee then the producer receives an indemnity payment. In quantity terms, the indemnity payment is equal to the difference between the yield guarantee and the actual yield multiplied by the number of insured acres.

Example:

Suppose a producer has an APH yield of 40 bushels per acre and selects a 75 percent yield election on a 100 acre optional unit in which the producer has a 100 percent ownership share. The yield guarantee is:

Yield guarantee = (Yield Election) x (APH approved yield) = 0.75 x 40 bushels per acre = 30 bushels per acre

Suppose the producer actually harvests 20 bushels per acre. The yield guarantee of 30 bushels per acre is greater than the actual yield of 20 bushels per acre. Thus, the producer is eligible for an indemnity payment. In quantity terms, the indemnity payment is:

Indemnity Payment in Quantity Terms = (Yield guarantee - Actual Yield) x Insured Acres = (30 bushels - 20 bushels) x 100 acres = 1,000 bushels

Market Prices and Price Elections

For each MPCI crop, the FCIC establishes a market price for the forthcoming crop year. The producer selects a price election between 60 percent and 100 percent of the market price. The elected price is the price at which the producer's quantity loss is valued. In dollar terms, if a quantity indemnity loss is incurred then the producer receives a dollar indemnity payment equal to the quantity indemnity loss multiplied by the elected price

Example (continued):

Suppose the FCIC establishes a market price (prior to insurance signup) for the insured crop of $4 per bushel. A producer selects a 75 percent price election. The elected price is:

Elected price = (Price Election) x (FCIC Market Price) = 0.75 x $ 4 per bushel = $3 per bushel

Dollar Indemnity Payment = Indemnity Payment in Quantity Terms x Elected Price = 1,000 bushels x $3 per bushel = $3,000

Premium Rates and Premium Payments

Premium rates are expressed as percentages of coverage. Different premium rates are applied for each coverage level. As coverage levels increase, premium rates paid by producers also increase because larger portions of their crops are covered against loss. The producer's premium rate is applied to the maximum dollar indemnity payment the producer could receive under the contract, also called the liability or amount of insurance purchased. This is the indemnity payment the producer will receive if there is a total crop loss; that is, if the actual harvest yield is zero. The total premium payment for the policy is equal to this liability multiplied by the premium rate. A producer must also pay an administrative fee. This administrative fee may be waived in some cases.

Example (continued):

A producer's APH yield on a 100 acre optional unit in which the producer has a 100 percent share is 40 bushels per acre, the producer's selected coverage level is 75%, the FCIC predicted price is $4, and the producer's selected price election is 75 percent. In this case, the FCIC-established premium rate to be paid by the producer is 7 percent of the maximum possible indemnity payment (liability).

If the producer has a complete crop loss, the harvest yield is zero and therefore, in quantity terms, the maximum indemnity loss per acre is the yield guarantee of 30 bushels. In dollar terms, the maximum indemnity payment on each acre is the yield guarantee multiplied by the elected price (30 bushels per acre x $3 or $90 per acre). The maximum indemnity payment or amount of insurance the producer could receive under the MPCI policy for the optional unit is the maximum payment per acre multiplied by the number of acres; that is,

Maximum Indemnity Payment = Yield guarantee x Elected Price x Insured Acres = 30 bushels per acre x $3 per bushel x 100 acres = $9,000.

Producer A's Premium Payment = Premium Rate x Maximum Indemnity Payment = 7 percent x $9,000 = $630.

Note that if a producer increases the price election, then the elected price increases and the maximum dollar indemnity or amount of insurance increases. If a producer increases the price election to 100 percent, the selected elected price increases to $4 per bushel and the maximum indemnity payment increases to $12,000 (30 bushels per acre x $4 per bushel x 100 acres). As a result, the premium for the optional unit increases to $840 (7 percent x $12,000).

In fact, the premium increases by the same percentage as the elected price and the amount of insurance purchased (by 25 percent in this example) because, for a given coverage level, the premium payment is a fixed percentage of the dollar amount of insurance purchased by the producer.

Premiums are payable on the premium billing date. However, a producer is not considered delinquent in paying the premium until the termination date for the insurance policy, at the which time the policy is canceled.

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 premiums covered all expected indemnity payments.

Premium subsidies generally do not increase in proportion to yield elections. Producers insuring against crop losses with lower yield elections receive subsidies that make up a larger share of their total premium payments than producers insuring against crop losses with higher yield elections.

Crop Shares

Producers often share 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 (cont.)

Assume a producer only has a 67 percent share in the crop. The producer can now only receive 67 percent of any indemnity payment based on a 100 percent share. However, the producer only has to pay 67 percent of the premium based on a 100 percent share.

Prevented Planting and Replanting Indemnity Payments

In some years, producers may need to replant a crop or maybe prevented from planting a crop. In some circumstances, producers may be indemnified for replanting costs. 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 drought, failure of irrigation supply, or excess moisture).

Catastrophic Risk Protection

A producer may purchase a Catastrophic Risk Protection (CAT) endorsement. As with MPCI, a producer must establish an APH yield. The yield guarantee for losses is 50 percent of the APH approved yield and losses under the CAT endorsement are insured at 55 percent of the FCIC expected price for the crop.

A producer must pay an administrative fee of $100 for each crop in each county which may be waived for limited resource farmers. However, producers are not required to pay any premiums for this coverage.

Producers can only purchase a CAT endorsement if the amount of insurance being purchased (the maximum indemnity payment) exceeds the administrative fee for the crop ($100).

Sign Up Dates

The FCIC identifies unique dates by which producers must sign up for their MPCI and Catastrophic Risk Protection (CAT) policies that are specific to each county for each crop.

Crops Covered by MPCI and CAT Policies

Examples of crops covered by MPCI in at least some counties include: alfalfa seed, almonds, apples, barley, beans (canning and processing) canola, citrus, citrus trees, corn, cranberries, dry beans, extra long staple cotton, flax, figs, Florida fruit trees, forage production, forage seeding, grain sorghum, millet, nursery, oats, peaches, peanuts, pears, peas, peppers, plums, popcorn, potatoes, prunes, raisins, rice, rye, safflower, soybeans, stone fruit, sugar beets, sugarcane, sunflower seeds, sweet corn (canning and freezing, and fresh market) tobacco, tomatoes(canning and processing), tomatoes (fresh market), upland cotton, walnuts, and wheat.

Reporting of Acreage and Crop Damage

In each crop year, producers with MPCI 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 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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