Crop Insurance Decisions for 2006

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Several new types of crop insurance policies have been introduced in the last decade. Besides the traditional yield insurance, policies that guarantee a minimum level of gross revenue per acre are also available. Both yield and revenue assurance are available as group policies based on county yield results as well as for individual farm units. The various types of policies are summarized in Table 1. Figures 1 and 2 illustrate the market share for each type of policy for insured corn and soybean acres in Iowa in 2005.

Table 1. Types of crop insurance policies available for corn and soybeans in Iowa

	Individual Policies	Group Policies
Yield insurance	APH (Actual Production History)	GRP (Group Risk Plan)
Revenue insurance	RA (Revenue Assurance) CRC (Crop Revenue Coverage)	GRIP (Group Risk Income Protection)

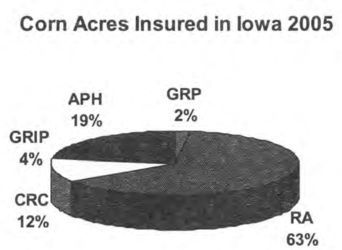

Figure 1. Coverage for 2005 Iowa corn acres

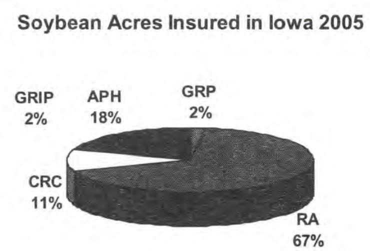

Figure 2. Coverage for 2005 Iowa soybean acres

Indemnity Prices

Even if producers don't alter their insurance coverage level from year to year, the dollar value of their guarantee will change according to market prices. The price used to calculate the guarantee and determine the payment in case of a loss is called the "indemnity price." The level of the indemnity price each year depends on market projections and the type of insurance policy. Traditional yield insurance, or APH, uses a projected harvest cash price set by the USDA in January. For 2005 these prices were fixed at $2.20 for corn and $5.00 for soybeans, considerably lower than 2004 levels (see table 2).

For revenue insurance, both RA and CRC, indemnity prices are set equal to the average Chicago Board of Trade futures prices during the month of February. Prices for November soybean contracts and December corn contracts are used. These average prices aren't known until March 1 each year, but are usually higher than the APH indemnity prices. The producer's actual revenue is calculated as the product of the actual farm yield and the average futures price in October for soybeans and CRC corn, or in November for RA and GRIP corn. The harvest prices for the last two years are shown in Table 2. Revenue Assurance can be purchased with the "harvest price option," which means that if the fall futures price is higher than the February futures price, the producer's guarantee is recalculated based on the higher fall price. This feature is standard for CRC policies.

Table 2. Indemnity and harvest prices for crop insurance

Beginning indemnity price	Corn		Soybeans	
	2004	2005	2004	2005
APH, GRP	$2.45	$2.20	$5.60	$5.00
RA, CRC	$2.83	$2.32	$6.72	$5.53
GRIP	$2.93	$2.38	$7.27	$5.99
Harvest price				
APH, GRP	Not applic.	Not applic.	Not applic.	Not applic.
RA, GRIP	$1.99	Nov. futures	$5.26	$5.53
CRC	$2.05	$2.02	$5.26	$5.53
Percent change				
RA	-30%	?	-22%	0%
CRC	-28%	-13%	-22%	0%
GRIP	-32%	?	-28%	-8%
USDA payment prices				
Loan rate (Iowa average)	$1.90	$1.90	$4.93	$4.93
Counter cyclical trigger	$2.35	$2.35	$5.36	$5.36

Group Insurance

Group crop insurance policies, GRIP and its yield insurance counterpart, GRP, have not been very popular in Iowa. Only 6 percent of corn acres and 4 percent of soybean acres in the state were insured with group policies this year. Many farmers are uneasy the fact that protection is based on average county yields instead of individual farm yields. However, producers who have land in several locations within a county or who can safely carry more financial risk may find group insurance to be a low cost alternative with a significant chance of paying an indemnity.

The GRIP policy has used the average futures prices during just the last 5 days of February as the indemnity price, although in 2006 GRIP indemnity prices will be the same as for CRC and RA individual policies. In 2004 a late month market rally resulted in very attractive indemnity prices of $2.93 for corn and $7.27 for soybeans. The fall market prices used to calculate the "actual" revenues were $1.99 and $5.26 respectively, a decrease of 32 percent for corn and nearly 28 percent for soybeans. Some producers who purchased GRIP with a high level of coverage received attractive payments due solely to the decline in price. The 2005 indemnity prices for GRIP were quite a bit lower than in 2004, so only producers in counties with below average yields are likely to receive payments in 2005.

USDA Payments

USDA commodity program payments (LDPs) should also be taken into account when analyzing crop insurance coverage. Loan deficiency payments provide direct price protection when prices are low at harvest, and counter cyclical payments provide some additional price risk protection. When insurance indemnity prices are near USDA loan rates (after adjusting for basis difference), ordinary yield insurance (APH) with LDP eligibility provides about the same protection as standard revenue insurance alone. In both cases, yield and price risk are reduced. Of course, if a farmer purchases revenue insurance and prices go low enough to trigger indemnity payments, he/she will probably collect from both the insurance company and the USDA!

Preharvest Pricing

Producers who like to forward price much of their production prior to harvest can utilize CRC or RA insurance with the harvest price option to protect themselves against harvesting fewer bushels than they contract. As long as they don't commit to deliver more bushels than they have insured, they can rely on the insurance indemnity payment to cover the cost of any shortfall. This was especially helpful in 2004, when preharvest pricing opportunities were attractive. Revenue Assurance without the harvest price option is probably the least attractive alternative when indemnity prices are low.

Summary

When corn and soybean indemnity prices appear to be higher than "normal," standard revenue insurance products will help guarantee some of the price premium. When indemnity prices are down near USDA loan rate levels, yield insurance or revenue insurance with the increasing guarantee feature are more attractive.

References

Edwards, William. 2003. Managing Risk with Crop Insurance. FM 1854.

Hofstrand, Don, and William Edwards. 2000. Crop Revenue Insurance. FM 1853.