February 2001

Year 2001 Multiple-Peril Crop Insurance for Nebraska Corn, Grain Sorghum, Soybeans and Wheat

ROGER SELLEY
University of Nebraska-Lincoln, RSELLEY1@UNL.EDU

H. Douglas Jose
University of Nebraska-Lincoln, hjose1@unl.edu

Follow this and additional works at: http://digitalcommons.unl.edu/agecon_cornhusker

Part of the Agricultural and Resource Economics Commons

http://digitalcommons.unl.edu/agecon_cornhusker/25

This Article is brought to you for free and open access by the Agricultural Economics Department at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Cornhusker Economics by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
The deadline for sign-up for Multiple-Peril Crop Insurance for spring crops in Nebraska is March 15. Winter wheat sign-up deadline is September 30. Premium subsidies have changed, particularly for higher coverage levels and CRC. In 2001 the administrative fee for CAT is $100 per crop per county, and for all policies above CAT the fee is $30 per crop per year.

**Insurance Alternatives**

1. **Catastrophic Coverage (CAT)**– Provides coverage at 50% of the Actual Production History (APH) yield, with insurance payments based on 55% of the established price.

2. **Additional APH Insurance**– Up to 85% yield coverage and 100% price elections can be purchased under the APH plan. Typically called multi-peril insurance by insurance agents, although all alternatives listed here are multiple-peril. In Nebraska, 80-85% coverage is available for corn, grain sorghum, soybeans and wheat.

3. **Group Risk Plan (GRP)** coverage which is based on county yields is available in some counties.

4. **Crop Revenue Coverage (CRC)** provides a revenue guarantee and is available for corn, grain sorghum, soybeans and winter wheat in Nebraska.

**APH Yields**

If there are actual records, the guarantee is based on producer records of actual yields for up to 10 consecutive years. If less than four years’ records are provided a FCIC transitional yield is used for the missing years. In 2001, yields equivalent to 60% of the T-yield can be substituted for each of the actual yields below that level.
Multiple-Peril Established Price Levels for 2001

<table>
<thead>
<tr>
<th>APH &amp; GRP</th>
<th>Base Price*</th>
<th>Harvest Price**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>$2.05</td>
<td>TBA November Average of CBT Corn</td>
</tr>
<tr>
<td>Grain Sorghum</td>
<td>$1.80</td>
<td>TBA 95% of November Average of CBT Corn</td>
</tr>
<tr>
<td>Soybean</td>
<td>$5.26</td>
<td>TBA October Average of CBT Beans</td>
</tr>
<tr>
<td>Wheat</td>
<td>$2.80</td>
<td>$3.31 July 15 - August 14 Average of KCBT Wheat</td>
</tr>
</tbody>
</table>

* Determined using February average of same contracts used for harvest price except for wheat which uses Aug 15-Sep14 KCBT Jul 01 average for the base price.

** But no more than $1.50 above and no less than $1.50 below the base price for corn and grain sorghum. Maximum range for soybeans is $3 and for wheat $2.

TBA = to be announced by March 10, 2001.

How Does the APH Program Work?

**APH Example for Grain Sorghum**

Example yield guarantee = coverage level/100 x APH yield

Example coverage level = 65%
Example APH = 100 bu/acre
APH yield guarantee = 65% of 100bu = 65 bu/acre

Indemnity bushels = Yield guarantee - harvested yield if below guarantee
Example harvested yield = 55 bu/acre
Indemnity bushels = 65 - 55 = 10 bu/acre

Indemnity per bushel = Price election/100 x APH price
Example price election = 100%
2001 crop sorghum APH price = $1.80/bu
Indemnity per bushel = 100% of $1.80 = $1.80/bu
Indemnity payment = Indemnity bushels x price = 10 bu x $1.80 = $18.00/acre

Additional Insurance

**APH** - If a grower wishes to have insurance above the 50/55 CAT level, the following alternatives are available under the APH program:

<table>
<thead>
<tr>
<th>Coverage Levels As % of APH Yield</th>
<th>Price Elections As % of Maximum Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>55</td>
<td>91-100</td>
</tr>
<tr>
<td>60</td>
<td>84-100</td>
</tr>
<tr>
<td>65</td>
<td>77-100</td>
</tr>
<tr>
<td>70</td>
<td>72-100</td>
</tr>
<tr>
<td>75</td>
<td>67-100</td>
</tr>
<tr>
<td>80</td>
<td>63-100</td>
</tr>
</tbody>
</table>

**GRP** - Additional insurance options available under the GRP program are:

<table>
<thead>
<tr>
<th>GRP Coverage Levels as % of County Yield</th>
<th>Protection Levels as % of Maximum $ Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>70, 75, 80, 85, 90</td>
<td>60 - 100</td>
</tr>
</tbody>
</table>

The maximum dollar protection under GRP is the expected county yield times the GRP price x 1.5.

Indemnity payments are based upon the percentage short fall of the NASS (Nebraska Agricultural Statistical Service) county yield compared to the trigger yield. The trigger yield is the coverage level chosen by the producer times the expected county yield.
GRP Example for Grain Sorghum

Trigger Yield =
(Coverage level/100) x Expected county yield
Example coverage level = 90%
Example expected county yield = 80 bu/acre
Trigger yield = 90% of 80 bu = 72 bu/acre

Maximum protection per acre =
Expected county yield x GRP price x 1.5
2001 crop sorghum GRP Price = $1.80/bu
Maximum $ protection =
80 bu x $1.80 x 1.5 = $216/acre

Policy protection =
60 to 100% of the Maximum $ protection/acre
Example protection level = 100%
Policy protection = 100% of $216 = $216/ac

Payment factor =
(Trigger yield - actual county yield) / Trigger yield if actual county yield is below trigger yield
Example actual county yield = 66 bu/acre
Payment factor = (72 - 66)/72 = 0.833

Indemnity payment = Policy protection x payment factor = $216 x .0833 = $17.99/acre

Note that the GRP indemnity payment does not depend on the producer's yield. Thus, GRP insurance will provide protection from a low producer yield only if the county yield is below the expected county yield at the same time the producer's yield is low.

CRC

CRC provides a minimum revenue guarantee based upon a base (planting time) price. The revenue guarantee will increase with any increase in the harvest market price above the base price.

CRC Provisions:

Revenue Guarantee = (coverage level/100) x APH yield x (larger of base or harvest price).

Coverage level alternatives under CRC are 50, 55, 60, 65, 70, 75, 80 and 85%, for corn, grain sorghum, soybeans and wheat in Nebraska.

CRC Example for Grain Sorghum:

Minimum revenue guarantee =
Coverage level/100 x APH x Base Price
APH = 100 bu/acre
Coverage level = 65%
Base price = TBA, example $2.28

Minimum revenue guarantee =
65% of 100 bu/ac x $2.28 /bu = $148.20/acre.

Final revenue guarantee =
Coverage level/100 x APH x (larger of base or harvest price)
Assume a CRC Harvest Price = $2.25/bushel
Revenue guarantee = 65% of 100 bu/ac x $2.28/bu = $148.20/acre (using larger of base and harvest price)
Calculated revenue =
Harvest yield x CRC harvest price
Harvest Yield: 55 bushels/acre
Calculated revenue =
55 bu/acre x $2.25/bu = $123.75

Indemnity payment = revenue guarantee - calculated revenue if below guarantee
Indemnity payment =
$148.20 - $123.75 = $24.45/acre.

In the above example, an indemnity payment was triggered due to a low price and low yield. If prices had risen resulting in a CRC harvest price of $2.50 per bushel and the same 55 bushels were produced, the calculated revenue would be $137.50 and an indemnity of $25 paid because of falling short of the final revenue guarantee of 65% of 100 bu/acre x $2.50 = $162.50.

The increase in the revenue guarantee with higher harvest prices is a particularly attractive feature when forward pricing grain. This increased protection will help purchase any production short fall of forward-priced grain at the prevailing market price.

Other Crops

Check with your insurance agent for other crops that are covered by MPCI. For crops that are not covered by an MPCI program, the Non-insured Assistance Program (NAP) provides catastrophic coverage similar to past disaster programs.

Roger Selley, (402) 762-3535 and H. Douglas Jose, (402) 472-1749
University of Nebraska Extension
Farm Management Specialists