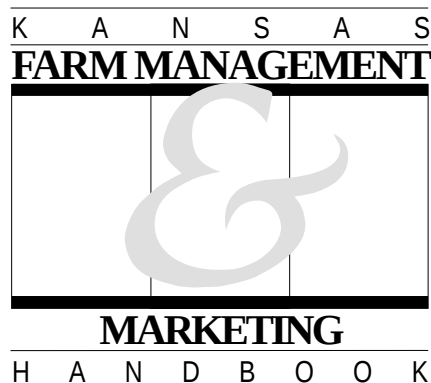




# Revenue Insurance

Department of Agricultural Economics



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The introduction of revenue insurance contracts began with crop year 1996. The four contracts offered are Income Protection (IP) in selected counties, Crop Revenue Coverage (CRC), Revenue Assurance (RA), and Revenue Assurance with the Harvest Price Option (RA-HPO) that are offered statewide (Table 1).

Premiums are higher for CRC and RA-HPO than MPCI, while in some cases IP and RA premiums are lower than MPCI premiums. The lower IP premiums are caused by no units. IP and RA will often pay lower indemnity payments when market prices increase, causing lower premium costs.

Revenue indemnity payments are based on a calculated harvest price that may increase or decrease during the growing

period. If the harvest price is higher, then RA-HPO and CRC coverages are automatically increased and the revenue to count is subtracted from the higher guarantee to determine indemnity payments.

If harvest prices increase under IP or RA, it will require a larger yield loss to trigger any payments. For example, a \$5.25 futures price on a 70 percent IP or RA contract would require a 56 percent yield loss to trigger a payment, while MPCI, RA-HPO, and CRC would require a 30 percent yield loss.

**No Price Guarantee:** None of the revenue products guarantee price. It is possible to have a price decline and still meet the revenue guarantee because of higher yields. A grower's local elevator price is normally lower than the calculated revenue prices.

**Table 1. Side-by-Side Comparison of MPCI, CRC, RA and RA-HPO**

| Product                                              | MPCI            | CRC                                                                   | RA                                                                     | RA-HPO                                                                 |
|------------------------------------------------------|-----------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|
| Coverage Levels                                      | 50% -85%        | 50% -85%                                                              | 65% -75%; 76%-85% with Enterprise Unit                                 | 65% -75%; 76%-85% with Enterprise Unit                                 |
| Units                                                | Optional, Basic | Optional, Basic, Enterprise                                           | Optional, Basic, Enterprise                                            | Optional, Basic, Enterprise                                            |
| Price Election                                       | Set by RMA      | Aug 15-Sep 14 Average closing price of KCBOT July 2001 wheat contract | Aug 15-Sep 14 Average closing price of KCBOT July 2001 wheat contract  | Aug 15-Sep 14 Average closing price of KCBOT July 2001 wheat contract  |
| Harvest Price                                        | N/A             | June 2001 Average closing price of KCBOT July 2001 wheat contract     | Jul 1-14, 2001 Average closing price of KCBOT July 2001 wheat contract | Jul 1-14, 2001 Average closing price of KCBOT July 2001 wheat contract |
| If Harvest Price Increases, Indemnity Payment Change | NO              | INCREASE                                                              | DECREASE                                                               | INCREASE                                                               |
| APH                                                  | SAME            | SAME                                                                  | SAME                                                                   | SAME                                                                   |
| Early Loss Payments                                  | YES             | Minimum Payment                                                       | None                                                                   | None                                                                   |
| Maximum Price Move                                   | N/A             | \$2.00                                                                | No Price Limit                                                         | No Price Limit                                                         |
| % of Premium Paid <sup>1</sup>                       | SAME            | SAME                                                                  | SAME                                                                   | SAME                                                                   |

<sup>1</sup>Percent subsidy for coverage levels of 50% is 67%; 55% & 60% is 64%; 65% & 70% is 59%; 75% is 55%; 80% is 48%; and 85% is 38%.

REVENUE INSURANCE WORKSHEET  
Analysis of Per Acre Net Cash Flow

Crop: \_\_\_\_\_  
Situation: \_\_\_\_\_

| Insurance Contract (Reno County Wheat)                                 |  | MPCI     |  | CRC       |  | CRC        |  | RA-HPO    |  | RA        |  | RA         |  | IP        |  | Your Farm  |  |
|------------------------------------------------------------------------|--|----------|--|-----------|--|------------|--|-----------|--|-----------|--|------------|--|-----------|--|------------|--|
| Harvest Price Scenario                                                 |  |          |  | Low Price |  | High Price |  | Low Price |  | Low Price |  | High Price |  | Low Price |  | High Price |  |
| Projected Crop Sales and Other Cash Inflows                            |  |          |  |           |  |            |  |           |  |           |  |            |  |           |  |            |  |
| 1. Enter Yield per Planted Acre                                        |  | 10.0     |  | 10.0      |  | 10.0       |  | 10.0      |  | 10.0      |  | 10.0       |  | 10.0      |  | 10.0       |  |
| 2. Expected Market Price + LDP                                         |  | \$2.80   |  | \$2.80    |  | \$5.00     |  | \$2.80    |  | \$5.00    |  | \$2.80     |  | \$5.00    |  | \$2.80     |  |
| 3. Expected Sales: (Line 1 x Line 2)                                   |  | \$28.00  |  | \$28.00   |  | \$50.00    |  | \$28.00   |  | \$50.00   |  | \$28.00    |  | \$50.00   |  | \$28.00    |  |
| 4. Government Payments & Other Receipts, No LDP <sup>1</sup>           |  | \$27.38  |  | \$27.38   |  | \$27.38    |  | \$27.38   |  | \$27.38   |  | \$27.38    |  | \$27.38   |  | \$27.38    |  |
| 5. Total Receipts: (Line 3 + Line 4)                                   |  | \$55.38  |  | \$55.38   |  | \$77.38    |  | \$55.38   |  | \$77.38   |  | \$55.38    |  | \$77.38   |  | \$55.38    |  |
| \$ of Coverage                                                         |  |          |  |           |  |            |  |           |  |           |  |            |  |           |  |            |  |
| 6. Average Yield for Insurance (APH)                                   |  | 40.0     |  | 40.0      |  | 40.0       |  | 40.0      |  | 40.0      |  | 40.0       |  | 40.0      |  | 40.0       |  |
| 7. Coverage Level (50% 55% 65% 70% 75% 80% 85%)                        |  | 70%      |  | 70%       |  | 70%        |  | 70%       |  | 70%       |  | 70%        |  | 70%       |  | 70%        |  |
| 8. Bushels per Acre Yield Guarantee (Line 6 X Line 7)                  |  | 28.0     |  |           |  |            |  |           |  |           |  |            |  |           |  |            |  |
| 9. Price Election/Expected Price <sup>2</sup>                          |  | \$2.80   |  | \$3.31    |  | \$3.31     |  | \$3.31    |  | \$3.31    |  | \$3.31     |  | \$3.31    |  | \$3.31     |  |
| 10. Minimum Revenue Guarantee (Line 6 X Line 7 X Line 9)               |  |          |  | \$92.68   |  | \$92.68    |  | \$92.68   |  | \$92.68   |  | \$92.68    |  | \$92.68   |  | \$92.68    |  |
| 11. Liability (Total Coverage)                                         |  | \$78.40  |  | \$148.68  |  | \$148.68   |  | No-Limit  |  | \$92.68   |  | \$92.68    |  | \$92.68   |  | \$92.68    |  |
| 12. Premium (Farmer Paid) <sup>3</sup>                                 |  | \$1.87   |  | \$2.94    |  | \$2.94     |  | \$3.09    |  | \$2.06    |  | \$2.06     |  | \$2.06    |  | \$2.06     |  |
| Projected Crop Cash Requirements                                       |  |          |  |           |  |            |  |           |  |           |  |            |  |           |  |            |  |
| 14. Enter Preharvest Cash Operating Expense <sup>4</sup>               |  | \$52.78  |  | \$52.78   |  | \$52.78    |  | \$52.78   |  | \$52.78   |  | \$52.78    |  | \$52.78   |  | \$52.78    |  |
| 15. Enter Harvest Cash Expense per Acre                                |  | \$13.60  |  | \$13.60   |  | \$13.60    |  | \$13.60   |  | \$13.60   |  | \$13.60    |  | \$13.60   |  | \$13.60    |  |
| 16. Enter Expenses/Bushel (\$0.24 x Yield) <sup>5</sup>                |  | \$2.40   |  | \$2.40    |  | \$2.40     |  | \$2.40    |  | \$2.40    |  | \$2.40     |  | \$2.40    |  | \$2.40     |  |
| 17. Debt Service, Other Fixed Cash Needs <sup>6</sup>                  |  | \$37.31  |  | \$37.31   |  | \$37.31    |  | \$37.31   |  | \$37.31   |  | \$37.31    |  | \$37.31   |  | \$37.31    |  |
| 18. Family Living <sup>7</sup>                                         |  | \$26.67  |  | \$26.67   |  | \$26.67    |  | \$26.67   |  | \$26.67   |  | \$26.67    |  | \$26.67   |  | \$26.67    |  |
| 19. Total Cash Requirements: (Sum Line 14 to Line 18)                  |  | \$132.76 |  | \$132.76  |  | \$132.76   |  | \$132.76  |  | \$132.76  |  | \$132.76   |  | \$132.76  |  | \$132.76   |  |
| Indemnity Payment & Premium                                            |  |          |  |           |  |            |  |           |  |           |  |            |  |           |  |            |  |
| 20. Bushel Loss per Acre (bu.)                                         |  | 18.0     |  |           |  |            |  |           |  |           |  |            |  |           |  |            |  |
| 21. Harvest Market Price <sup>8</sup>                                  |  |          |  | \$2.50    |  | \$5.25     |  | \$2.50    |  | \$5.25    |  | \$2.50     |  | \$5.25    |  | \$2.50     |  |
| 22. Final Revenue Guarantee                                            |  |          |  | \$92.68   |  | \$147.00   |  | \$92.68   |  | \$147.00  |  | \$92.68    |  | \$147.00  |  | \$92.68    |  |
| 23. Less Revenue to Count                                              |  |          |  | \$25.00   |  | \$52.50    |  | \$25.00   |  | \$52.50   |  | \$25.00    |  | \$52.50   |  | \$25.00    |  |
| 24. Indemnity Payment per Acre                                         |  | \$50.40  |  | \$67.68   |  | \$94.50    |  | \$67.68   |  | \$94.50   |  | \$67.68    |  | \$94.50   |  | \$67.68    |  |
| 25. Net Insurance Payment Received: (Line 24 - Line 12)                |  | \$48.53  |  | \$64.74   |  | \$91.56    |  | \$64.59   |  | \$91.41   |  | \$65.62    |  | \$91.41   |  | \$65.62    |  |
| 26. Net Cash Flow: (Line 5 - Line 12 - Line 19 + Line 25) <sup>9</sup> |  | -\$28.85 |  | -\$12.64  |  | \$36.18    |  | -\$12.79  |  | -\$11.76  |  | -\$11.76   |  | -\$11.76  |  | -\$17.26   |  |

<sup>1</sup>FAIR payment is not subject to price or yield risk. This does not include the average LDP payment of 51 cents paid in 1999. <sup>2</sup>Price elections and revenue prices are available from local insurance agents. <sup>3</sup>Premium rates for a specific farm and proven yield can be obtained from insurance agents. <sup>4</sup>Obtain crop expense estimates from your records or KSU Farm Management Association Summary. Use only cash expenses because this is a cash flow analysis. <sup>5</sup>With a low yield, cash expenses of some harvest costs, such as trucking and storage, decline. <sup>6</sup>Debt load, off-farm income and/or livestock enterprises will affect cash requirements. Includes a land payment of \$7.68. <sup>7</sup>Assumes \$40,000 for family living cost and 1,500 acres of crop land (Source: KSU Farm Management Association Summary). <sup>8</sup>The harvest price RA has different measurement period than CRC. It is unlikely the harvest prices will be the same as was assumed in the analysis. <sup>9</sup>Net cash flow was used for the analysis because normally a farm will not be profitable when a crop disaster occurs. The farmer's short-term strategy is to cover cash flow requirements.

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