Revenue Insurance

Department of Agricultural Economics — www.agmanager.info

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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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 with enterprise unit only, 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 APH (MPCI), while in some cases IP and RA premiums are lower than APH premiums. 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 $7.41 harvest price on a 70 percent IP or RA contract would require a 50 percent yield loss to trigger a payment, while APH, 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 that are based on futures prices.

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

Product	MPCI-APH	CRC	RA	RA-HPO
Coverage Levels	50% -85%	50% -85%	65%-85%	65%-85%
Units	Optional, Basic	Optional, Basic, Enterprise	Optional, Basic, Enterprise, Whole Farm Unit	Optional, Basic, Enterprise Whole Farm Unit
Price Election	Set by RMA	Aug 15-Sep 14 Average closing price of KCBOT July 2010 wheat contract	Aug 15-Sep 14 Average closing price of KCBOT July 2010 wheat contract	Aug 15-Sep 14 Average closing price of KCBOT July 2010 wheat contract
Harvest Price	N/A	June 2010 Average closing price of KCBOT July 2010 wheat contract	Jul 1-14, 2010 Average closing price of KCBOT July 2010 wheat contract	Jul 1-14, 2010 Average closing price of KCBOT July 2010 wheat contract
If Harvest Price Increases, Indemnity Payment Change	NO	INCREASE	DECREASE	INCREASE
APH Approved Yield	SAME	SAME	SAME	SAME
Early Loss Payments	YES	Minimum Payment	Minimum Payment	Minimum Payment
Maximum Price Move	N/A	2 × base price	N/A	2 × base price
% of Premium Paid[1]	SAME	SAME	SAME	SAME

[1]*Percent subsidy for coverage levels of 50% is 67%; 55% and 60% is 64%; 65% and 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 (Central Kansas Wheat)	MPCI	CRC	CRC	RA-HPO	RA-HPO	RA	RA	IP	IP	Your	Your
Harvest Price Scenario		Low Price	High Price	Low Price	High Price	Low Price	High Price	Low Price	High Price	Farm	Farm
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	10.0	________	________
2. Expected Market Price + LDP	$4.00	$4.00	$7.50	$4.00	$7.50	$4.00	$7.50	$4.00	$7.50	$________	$________
3. Expected Sales: (Line 1 × Line 2)	$40.00	$40.00	$75.00	$40.00	$75.00	$40.00	$75.00	$40.00	$75.00	$________	$________
4. Counter Cyclical or ACRE Payment	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		
5. Direct FSA Payment, Straw & Other Receipts, No LDP[1]	$18.53	$18.53	$18.53	$18.53	$18.53	$18.53	$18.53	$18.53	$18.53	$________	$________
6. Total Receipts: (Line 3 + Line 4 + line 5)	$58.53	$58.53	$93.53	$58.53	$93.53	$58.53	$93.53	$58.53	$93.53	$________	$________
$ of Coverage & Premium											
7. Actual Production History (10 year average farm yield)	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	________	________
8. Coverage Level (50% 55% 65% 70% 75% 80% 85%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	_______%	_______%
9. Bushels per Acre Yield Guarantee (Line 7 × Line 8)	28.0									________	________
10. Price Election/Expected Price[2]	$5.20	$5.42	$5.42	$5.42	$5.42	$5.42	$5.42	$5.29	$5.29	$________	$________
11. Liability/Min. Rev. Guarantee (Line 7 × Line 8 × Line 10)	$145.60	$151.76	$151.76	$151.76	$151.76	$151.76	$151.76	$148.12	$148.12	$________	$________
12. Maximum Harvest Price Rev. Guarantee (Line 11 × 2)[3]		$303.52	$303.52	$303.52	$303.52					$________	$________
13. Premium (Farmer Paid)[4]	$6.44	$9.38	$9.38	$9.91	$9.91	$7.35	$7.35	$5.04	$5.04	$________	$________
Projected Crop Cash Requirements											
14. Enter Preharvest Cash Operating Expense[5]	$119.46	$119.46	$119.46	$119.46	$119.46	$119.46	$119.46	$119.46	$119.46	$________	$________
15. Enter Harvest Cash Expense per Acre	$19.28	$19.28	$19.28	$19.28	$19.28	$19.28	$19.28	$19.28	$19.28	$________	$________
16. Enter Expenses/Bushel ($0.26 × Line 1)[6]	$2.60	$2.60	$2.60	$2.60	$2.60	$2.60	$2.60	$2.60	$2.60	$________	$________
17. Debt Service, Other Fixed Cash Needs[7]	$23.10	$23.10	$23.10	$23.10	$23.10	$23.10	$23.10	$23.10	$23.10	$________	$________
18. Family Living[8]	$33.51	$33.51	$33.51	$33.51	$33.51	$33.51	$33.51	$33.51	$33.51	$________	$________
19. Total Cash Requirements: (Sum Line 14 to Line 18)	$197.95	$197.95	$197.95	$197.95	$197.95	$197.95	$197.95	$197.95	$197.95	$________	$________
Indemnity Payment											
20. Bushel Loss per Acre (bu.)	18.0									________	________
21. Harvest Market Price		$4.50	$8.00	$4.50	$8.00	$4.50	$8.00	$4.50	$8.00	$________	$________
22. Final Rev. Cov. (Max Line 10, Line 21 × Line 7 × Line 8)		$151.76	$224.00	$151.76	$224.00	$151.76	$151.76	$148.12	$148.12	$________	$________
23. Less Revenue to Count (Line 1 × Line 21)		$45.00	$80.00	$45.00	$80.00	$45.00	$80.00	$45.00	$80.00	$________	$________
24. Indemnity Payment per Acre	$93.60	$106.76	$144.00	$106.76	$144.00	$106.76	$71.76	$103.12	$68.12	$________	$________
25. Net Insurance Payment Received: (Line 24 - Line 13)	$87.16	$97.38	$134.62	$96.85	$134.09	$99.41	$64.41	$98.08	$63.08	$________	$________
26. Net Cash Flow: (Line 6 - Line 19 + Line 25)[9]	-$52.26	-$42.04	$30.20	-$42.57	$29.67	-$40.01	-$40.01	-$41.34	-$41.34	$________	$________

[1] *Direct payment is not subject to price or yield risk but the counter cyclical payment is subject to price risk.*
[2] *Revenue prices are based on KCBOT wheat prices and IP prices are based on CBOT wheat price. Local insurance agents will have the RMA published prices for their region.*
[3] *The Harvest Price Option will increase the revenue guarantee in RA an CRC when the harvest price is higher base price, up to 2 times the base price.*
[4] *Premium rates for a specific farm and proven yield can be obtained from insurance agents.*
[5] *Obtain crop expense estimates from your records or KSU Farm Management Association Summary. Use only cash expenses because this is a cash flow analysis.*
[6] *With a low yield, cash expenses of some harvest costs, such as trucking and storage, decline.*
[7] *Debt load, off farm income and/or livestock enterprises will affect cash requirements.*
[8] *Assumes $53,620 for family living cost and 1,600 acres of crop land (Source: KSU Farm Management Association Summary).*
[9] *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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