

Crop Insurance Basics



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Laying the Groundwork

- Identify what type of producer you are. Grain, Cattle, or Both?
- How many farms have base acres enrolled in either ARC or PLC?
- Do you have a significant amount of acres that are not covered by base acres?
- Do you plant crops that are different than the enrolled base acres?
- What is your risk exposure? Do you have a high debt-to-equity ratio?
- Variable cost of production.
- Did you enroll in SCO?



Determining Your Coverage Requirement

- This decision will vary from producer to producer.
- Highly dependent on fixed and variable costs of your operation.
- High fixed costs would include a new machinery compliment and high cash rents.
- High variable costs could arise from low soil fertility, significant weed pressure, excessive cultivation, etc.



Making the Crop Insurance Decision



2016 Wheat Budget

Variable Costs

- Revenue from 32bu. @ \$4.00/bu. is **\$128.00**
- Conservative variable costs equal **\$175.00**
- "Profit" equals **(\$47.00)/acre.**

Revenue (32bu. X \$4.00/bu.)	\$128.00
Wheat Seed (1.5bu. X \$10/bu.)	\$15.00
Machinery/Fuel	\$10.00
Herbicide/Pesticide	\$10.00
Fungicide	\$10.00
Crop Insurance (70% RP-OU)	\$9.00
Labor	\$5.00
Custom Hire	\$5.00
Fertilizer	\$30.00
Harvest	\$36.00
Land (Cash Lease)	\$45.00
Total Variable Costs	\$175.00
Returns over Variable Costs	(\$47.00)



Adapting the Budget

- Budgets are showing a loss at average production and prices.
- Break-even would occur at 35 bu. @ \$5.00 or 44 bu. @ \$4.00
- Cattle could provide up to \$80.00/acre in additional income at the cost of \$15 worth of fert. and an unknown reduction in grain yield.
- Yields reduced by ~6% for fields sown at same time, and 18% between production systems. Early sowing accounts for 2/3 of this reduction.



Revenue Insurance

- Prices are set at different times of the year based on the typical marketing of that crop.
- Projected Price Tracking: August 15th - Sept. 14th
- Harvest Price Tracking: Nov. 1st - 30th
- Allows a producer to lock in a revenue instead of a yield to reduce price risk.



Yield Protection

- YP-Protects against losses in yield, not revenue.
- Suitable for individuals looking to lower insurance costs and those who believe prices will trend higher.
- Know that yields above the guarantee do not always guarantee that variable costs of production are covered.



Optional Units Enterprise Units

OU Coverage	Subsidy
50%	67%
55%	64%
60%	64%
65%	59%
70%	59%
75%	55%
80%	48%
85%	38%

EU Coverage	Subsidy
50%	80%
55%	80%
60%	80%
65%	80%
70%	80%
75%	77%
80%	68%
85%	53%



Crop Insurance Plan-Optional Units

Plan	Level	Actual Price	Approved Yield	Guar. Yield/Acre	Guarantee \$/Acre	Base Premium \$/Acre	Premium as % of Guar.	Subsidized Premium \$/Acre
RP-OU	50	5.20	34	17.00	\$88.40	\$8.52	4.0	3.55
RP-OU	55	5.20	34	18.70	\$97.24	\$10.49	4.9	4.72
RP-OU	60	5.20	34	20.40	\$106.08	\$12.85	5.4	5.68
RP-OU	65	5.20	34	22.10	\$114.92	\$15.50	6.7	7.71
RP-OU	70	5.20	34	23.80	\$123.76	\$18.76	7.5	9.33
RP-OU	75	5.20	34	25.50	\$132.60	\$22.29	9.1	12.04
RP-OU	80	5.20	34	27.20	\$141.44	\$26.14	11.4	16.18
RP-OU	85	5.20	34	28.90	\$150.28	\$30.38	14.8	22.25



Crop Insurance Plan-Enterprise Units

Plan	Level	Actual Price	Approved Yield	Guar. Yield/Acre	Guarantee \$/Acre	Base Premium \$/Acre	Premium as % of Guar.	Subsidized Premium \$/Acre
RP-EU	50	5.20	34	17.00	\$88.40	\$8.52	1.9	\$1.70
RP-EU	55	5.20	34	18.70	\$97.24	\$10.49	2.2	\$2.10
RP-EU	60	5.20	34	20.40	\$106.08	\$12.85	2.4	\$2.57
RP-EU	65	5.20	34	22.10	\$114.92	\$15.50	2.7	\$3.10
RP-EU	70	5.20	34	23.80	\$123.76	\$18.76	3.0	\$3.75
RP-EU	75	5.20	34	25.50	\$132.60	\$22.29	3.9	\$5.13
RP-EU	80	5.20	34	27.20	\$141.44	\$26.14	5.9	\$8.36
RP-EU	85	5.20	34	28.90	\$150.28	\$30.38	9.5	\$14.28



Getting to an Answer: Can you cover the cost of Production

2015-Optional Units

■ 2015 Guarantee (34bu.
X \$6.30 X 0.70)

= \$149.94 - \$10.57 = \$139.37

■ Cost of production
\$167-\$18(Est. 2015
ARC Payment) = **\$149**

■ Cost of production
\$167-\$19(Est. 2015
PLC Payment) = **\$148**

2016-Optional Units

■ 2016 Guarantee (34bu.
X \$5.20 X 0.70)

= \$123.76 - \$9.33 = \$114.43

■ Cost of production
\$165-\$17(Est. 2016
ARC Payment) = **\$148**

■ Cost of production
\$165-\$44(Est. 2016
PLC Payment) = **\$121**



Getting to an Answer (Fluctuating Costs)

2016 (Decrease Costs By 15%)

■ 2016 Guarantee (34bu.
X \$5.20 X 0.70)

= \$123.76 - \$9.33 = \$114.43

■ Cost of production
\$140 - \$17 (Est. 2016
ARC Payment) = \$123

■ Cost of production
\$140 - \$44 (Est. 2016
PLC Payment) = \$96

2016 (Increase Costs By 15%)

■ 2016 Guarantee (34bu.
X \$5.20 X 0.70)

= \$123.76 - \$9.33 = \$114.43

■ Cost of production
\$190 - \$17 (Est. 2016
ARC Payment) = \$173

■ Cost of production
\$190 - \$44 (Est. 2016
PLC Payment) = \$146



Conclusion

- Low prices and low profitability offer an opportunity for good managers to excel.
- Be cautious with expenses that require “writing checks” as those costs must be covered.
- Remember, an average production year could still mean higher prices.



References

- **Crop Insurance Agent Locator**
■ (<http://prodwebnlb.rma.usda.gov/apps/AgentLocator/#/>)
- **RMA Crop Insurance Cost Estimator**
■ (<https://ewebapp.rma.usda.gov/apps/costestimator/Default.aspx>)
- **RMA Crop Insurance Decision Tool**
■ (<http://prodwebnlb.rma.usda.gov/apps/CIDT/>)
- **RMA Insurance Programs**
■ (<http://farm-risk-plans.rma.usda.gov/index.aspx?action=riskman.home>)

