

Marrying Marketing with Crop Insurance

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Serving you with over 4 decades of ag financial experience

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- Crop production risks
 - Weather - too dry
 - Weather - too wet
 - Weather - too hot
 - Weather - too cold (early frost)
- Diminishing production risk factors
 - Weeds
 - Technology in equipment
 - Planter monitors
 - Can still get stuck
 - Wet soils - tile (still an issue)
 - Seed technology - GMO
 - Corn borer
 - Insects
 - Fungicide
 - Operator skill level

What is the single most important factor in determining your cost of production?

- Fertilizer cost
- Land cost
- Family living expense
- Yield
- Color of your equipment



What is the most significant factor in determining yield?

- Seed selection
- Fertilizer
- Tile drainage
- Weather
- Equipment

“Drought will always be a risk to US agriculture. Risk is manageable and the producer that utilizes historical and forecast weather condition data can compensate for crop loss that may occur.”

-Dr. S. Elwynn Taylor, Iowa State University

Major Weather Events

- 1974 - Labor Day frost
- 1981 - Hail
- 1988 - Drought and heat
- 1991 - Wet planting then dry
- 2012 - Corn belt drought
- 2013 - Prevent planting

2012 Drought – Sell and Defend Strategy for Corn

Revenue guarantee - 80% enterprise	\$977
Cost of production analysis	\$4.23/bu.
Hedge price - January 2012	\$5.86/bu.
Estimated basis - \$0.25	\$5.63/bu.
Net profit: COP less cash price	\$1.40/bu.
Gross revenue priced @ 200 bu.	\$1126
Projected profit/acre @200 bu.	\$280/a.

2012 Drought – Sell and Defend Strategy for Corn

Drought develops - mainly eastern Corn Belt

- June 20 - Purchase \$6.00 corn call options for \$0.19; cost per acre @ 200 bu. corn: \$38
- June 21 - Weather pattern change is forecast
- June 21 - Sell back \$6 options for \$0.15; net loss with commission \$0.05/bu. or \$10/acre
- June 25 - Pattern change doesn't verify; hotter and drier now forecast for extended period
- June 25 - Opening of e-trade; buy back \$6.00 calls for \$0.24/bu.
- Defend strategy investment is now \$0.29/bu. or \$58/acre

2012 Drought – Sell and Defend Strategy for Corn

Drought evolves as predicted; prices surge

- July 18 - Sell call options for \$1.89; Dec '12 corn trading just over \$8
- Net gain: $\$1.89 - \$0.29 = \$1.60$ Profit @200 bu. corn = \$320
- Hedged profit (\$280/a.) + Option profit (\$320/a.) = \$600/a.

An old adage: “Everyone talks about the weather but nobody can do anything about it.”

But farmers do have options available to actually manage around weather.

Cost of Production Analysis

FINPACK®

**Farmer #1
2013**

COST OF PRODUCTION SUMMARY

Crop	Total Expenses	Less Govt & Other Income	With Labor & Mgt	Machinery Cost / Acre
Corn	4.94 /bu.	4.84 /bu.	4.99 /bu.	110.92
Soybeans	10.13 /bu.	9.75 /bu.	10.18 /bu.	87.68

FINPACK®

**Farmer # 2
2013 Cash Flow**

COST OF PRODUCTION SUMMARY

Crop	Total Expenses	Less Govt & Other Income	With Labor & Mgt	Machinery Cost / Acre
Corn	4.47 /bu.	4.40 /bu.	4.65 /bu.	141.89
Soybeans	11.64 /bu.	11.34 /bu.	12.01 /bu.	133.08

FINPACK®

**Farmer # 3
2013**

COST OF PRODUCTION SUMMARY

Crop	Total Expenses	Less Govt & Other Income	With Labor & Mgt	Machinery Cost / Acre
Corn	4.37 /bu.	4.28 /bu.	4.83 /bu.	166.21
Soybeans	8.70 /bu.	8.35 /bu.	9.89 /bu.	127.91

2013 Actual Farm Results Comparison

Farmer	# 1	# 2	# 3
Actual production history	178 bu.	197 bu.	218 bu.
80% coverage level	142.4 bu.	157.6 bu.	174.4
\$ Revenue guarantee	\$804	\$890	\$985
Actual yield	168 bu./a.	189bu./a.	197 bu./a.
Actual cash price	\$4.25	\$5.53*	\$5.75
Crop value	\$714	\$1,045	\$1,132
Revenue loss payment	\$90/a.	\$60/a.	\$119/a.
Total weather insurance	None	None	\$61/a.
Gross crop value	\$804**	\$1105***	\$1,312
Projected cost of production	\$4.94	\$4.46	\$4.37

* \$4.25 cash price plus \$1.28 put option profit

** Still at risk for market price - futures and basis

*** Still at risk for basis change

Comparative Variable Operating Expenses

Year	2013	2014
Seed	\$120	\$125
Fertilizer	\$220	\$180
Chemical	\$25	\$25
Insurance	\$30	\$23
Drying	\$40	\$25
Fuel	\$30	\$25
Repairs	\$20	\$20
Interest	\$20	\$20
Total	\$505	\$443

2013-14 Revenue Insurance Comparisons

Year/Coverage Level	2013/80	2013/85	2014/80	2014/85
Actual production history	190 bu.	190 bu.	190 bu.	190 bu.
80%	152 bu.	161.5 bu.	152 bu.	161.5 bu.
Price	\$5.65	\$5.65	\$4.60	\$4.60
Guarantee	\$858	\$912	\$699	\$743
Prevent plant/60%	\$515	\$547	\$420	\$445
Variable cost	\$505	\$521	\$443	\$459
Net of variable cost	\$353	\$391	\$256	\$284
Land cost	\$325	\$325	\$325	\$325
Cost of production*	\$ 4.36/bu.	\$ 4.46/bu.	\$ 4.04/bu.	\$ 4.14/bu.

* Does not include machinery or family living expenses

Total Weather Insurance by



What is TWI?

- Crop Insurance policy used as a supplement to MPCI
- Designed to pay for weather events that will result in a production loss
- Protecting your profit or 'top-end'
- Higher premiums because there is no subsidy
- Historically, TWI should pay out more often than MPCI

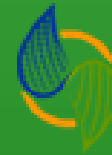
Total Weather Insurance by



Perils insured against:

- Early season drought
- Drought
- Excess moisture (may be removed)
- Daytime heat stress
- Nighttime heat stress (corn only)
- Low heat units/Early freeze

Total Weather Insurance by

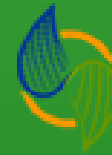


THE CLIMATE
CORPORATION

How it works:

- Uses a 'bucket' model to track available moisture to plant
- 2.5 mi. x 2.5 mi. Doppler radar grids record rainfall
- Daily temperatures taken from National Weather Service towers
- Water coming in, water running off, and ET tracked automatically on policy

Total Weather Insurance by



THE CLIMATE
CORPORATION

How it works:

- No reporting or adjusters, automatic payments based on weather loss
- Pick any number of acres to insure
- Payments first applied to deductible, then to premium, then sent automatically to the producer when the premium has been satisfied





