

SOLUTIONS FOR SUCCESS 3.0

Controlling the Crop Controllables

November/December 2017

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Learning Objectives: Developing a Call to Action for Your Farm

1. Having a strong faith

2. Managing farm & family costs

3. Staying focused on controllables

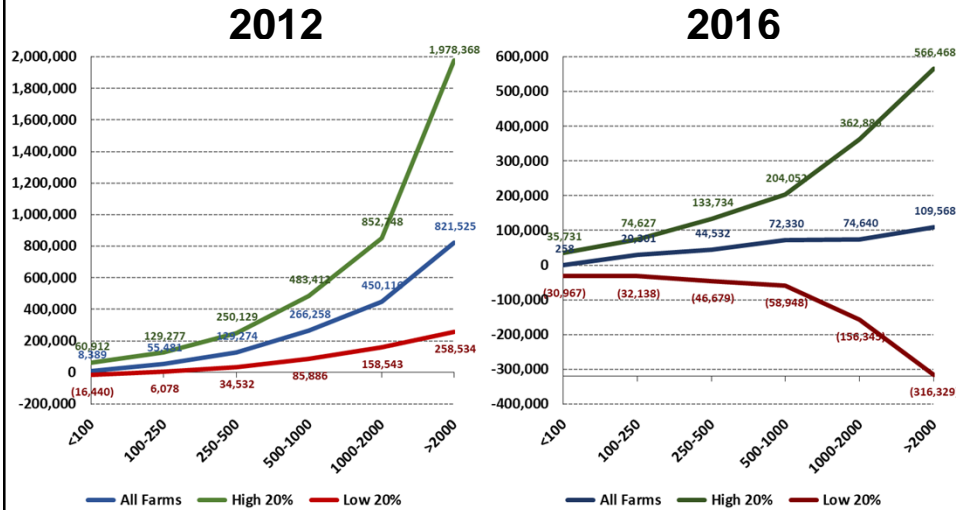
4. Developing a crop marketing plan

5. Providing follow through

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Source: Johnson, ISU Extension, November 2017

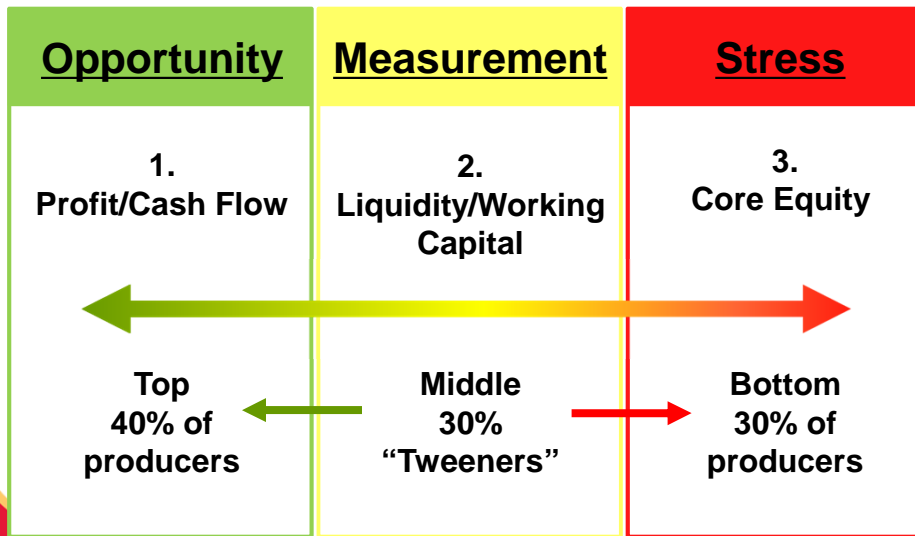
Comparing Net Farm Income Trends: N = 8,000 farms



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Source: FinBin Database, University of Minnesota, October 2017

Stages of Farm Financial Management



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Source: Dr. David Kohl, Virginia Tech, October 2017

Top 40%: Proactive Producers

- **Make incremental improvements**
- **Higher crop market prices (\$20 to \$40/A)**
- **Lower cash rent (\$20 to \$50/A)**
- **Lower fertilizer costs (\$20 to \$50/A)**
- **Modest family living expenses**
- **Sound financial management**
- **Utilize a “systems approach.”**



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Source: Dr. David Kohl, Virginia Tech University, October 2017

Bottom 30%: Reactive Producers

- **Lack financial management skills**
- **Operate using Schedule F with “minimize taxes” mentality**
- **Marginal resources: devaluing machinery & equipment, buildings**
- **High maintenance living costs**
- **Know it all or victim mentality**
- **Demographics are cycling them out.**

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Source: Dr. David Kohl, Virginia Tech University, October 2017

Case Study: Mike Merchandiser's Farm

- 1,580 Row-crop acres (1,300 acres in corn)
- 200,000 bushels of on-farm storage
- Fall/Winter cash flow needs of \$700,000
- 3,000 Row-crop acres with family members (shared combine, sprayer and labor)
- Marty's Actual Production History (APH) = 166 bu/A corn and 48 bu/A soybeans
- Buys Revenue Protection (RP) at the 80% level
- Pre-harvest markets up to 70% of corn APH using December futures (HTAs and Hedges).

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Source: Frontier Farm Credit, November 2017

Mike Merchandiser Case Study

STATUS QUO

780 owned acres; 800 rented

Solvent operation:

- Net Worth **\$6.1** million ↓

Profitable:

- 2017 Net farm income projected:
\$61,500

Problem: 2017 purchases:

- Adjoining 80 acres @ \$5,000/A
- Built new 30,000 bushel grain bin
- Traded for newer combine
- Working capital reduced to **\$250** per acre

PROPOSED SOLUTION

1. Manage crop costs & family living expenses

2. Merchandise grain

- a) Use Revenue Protection w/HTA contracts & hedging pre-harvest




- b) Develop a marketing plan for remaining unpriced 2017 bushels

3. Making profit and cash flow management the priority!

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Source: Frontier Farm Credit, November 2017

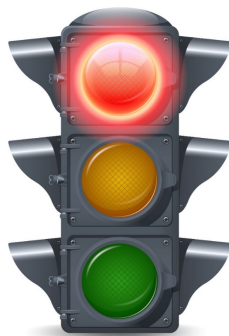
Mike Merchandiser : Financial Changes (as of December 1, 2017)

Financial Categories	Status Quo	Proposed Solution
Working capital per acre (total crop acres)	\$250/A	
Machinery debt per acre (total crop acres)	\$26/A	
Real estate payments per acre (total crop acres)	\$128/A	

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Source: Frontier Farm Credit, November 2017

Association Financial Guidelines



Financial Categories	Working Capital per acre	Machinery P&I per acre	Real Estate P&I + Taxes per acre
Red	< \$100	>\$75	> \$300
Yellow	\$200- \$100	\$50-75	\$200- \$300
Green	> \$200	<\$50	< \$200

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Source: Frontier Farm Credit, November 2017

Calculating Mike's 2017 Breakeven Costs

Corn

Yield	145	150	155	160	165	170	175	180	200
Expense/Acre	\$568	\$3.92	\$3.79	\$3.55	\$3.42	\$3.34	\$3.25	\$3.16	\$2.84
Cost/Bu									

Actual Breakeven: \$3.55
Estimated Breakeven: \$3.42

Soybeans

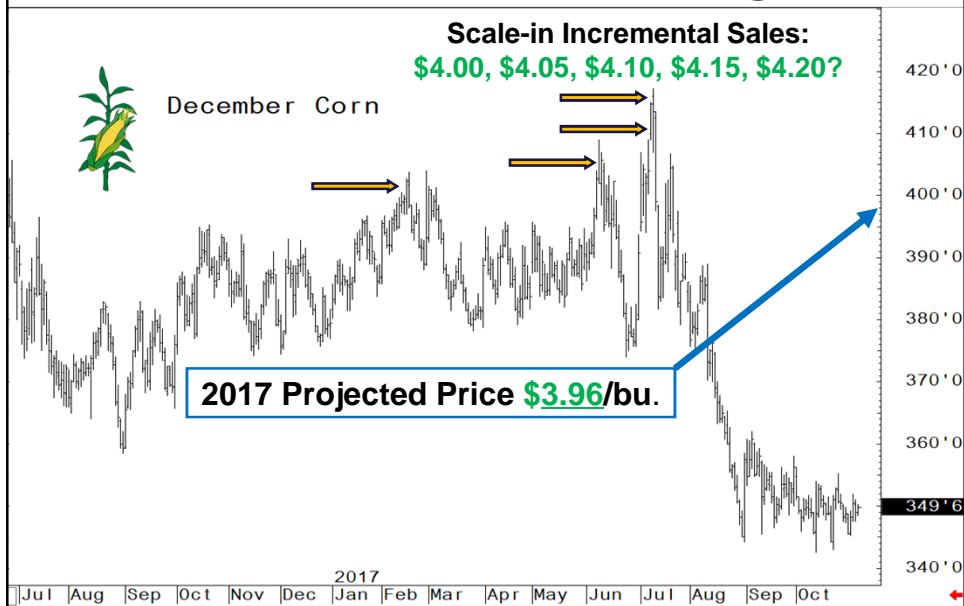
Yield	30	35	40	45	50	55	60	65	70	
Expense/Acre	\$435	\$14.50	\$12.43	\$10.8	\$9.67	\$9.06	\$7.91	\$7.25	\$6.69	\$6.21
Cost/Bu										

Actual Breakeven: \$9.67
Estimated Breakeven: \$9.06

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Source: Johnson, ISU Extension, November 2017

December 2017 Corn Marketing Plan



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Source: www.cmegroup.com, Nov. 3, 2017

10 Steps for Developing a Crop Marketing Plan

Step 1: Know your actual cost of production (good records)

Step 2: Consider your cash flow needs (next 12 months)

Step 3: Use Your Actual Production History (APH) data

Step 4: Build in a reasonable profit margin (5% to 10% ROI)

Step 5: Understand seasonal futures price trends

Step 6: Track local basis weekly (multi-year data)

Step 7: Leverage Revenue Protection insurance

Step 8: Utilize a variety of crop marketing tools

Step 9: Calculate on-farm vs. commercial storage costs

Step 10: Develop & implement a crop marketing plan.



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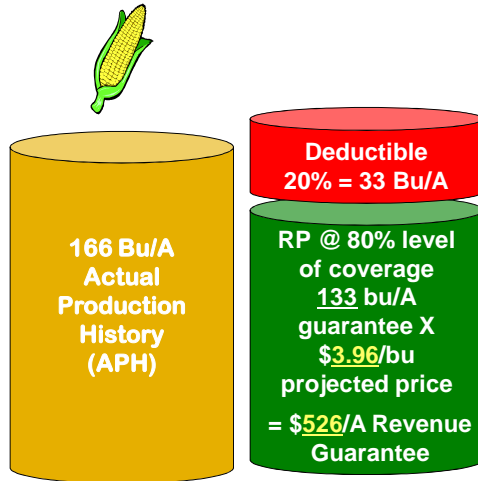
December Corn Seasonal Trends (2000-2017 Futures Indexed)



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Source: www.cfm.umn.edu, Usset, October 2017

Mike Pre-Harvest Sells using Revenue Protection (RP)



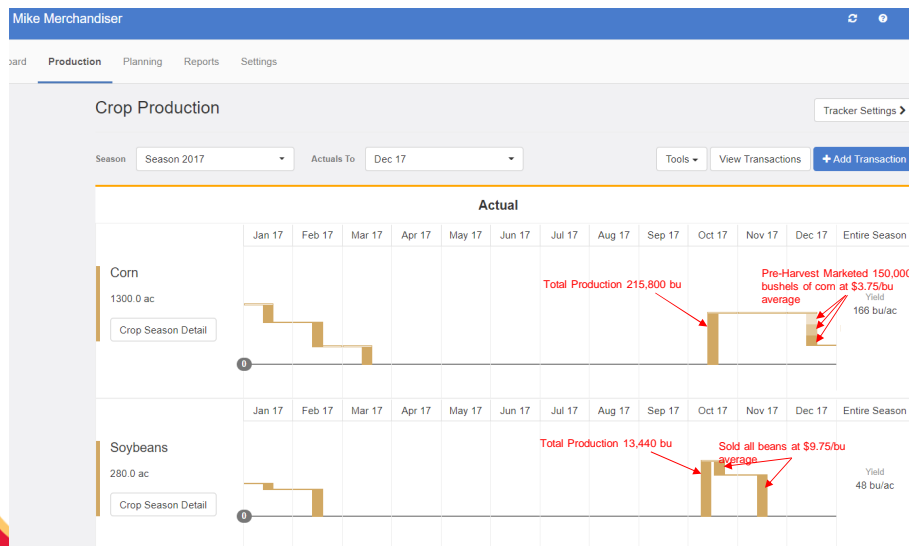
Marketing Strategy

- Pre-harvest price up to 70% of APH bushels
 - HTAs and Hedges
- Deliver HTA bushels in fall/winter months
 - Cash flow = **\$700,000**
- Store excess bushels on-farm; once basis narrows, make cash sales using a variety of marketing tools.

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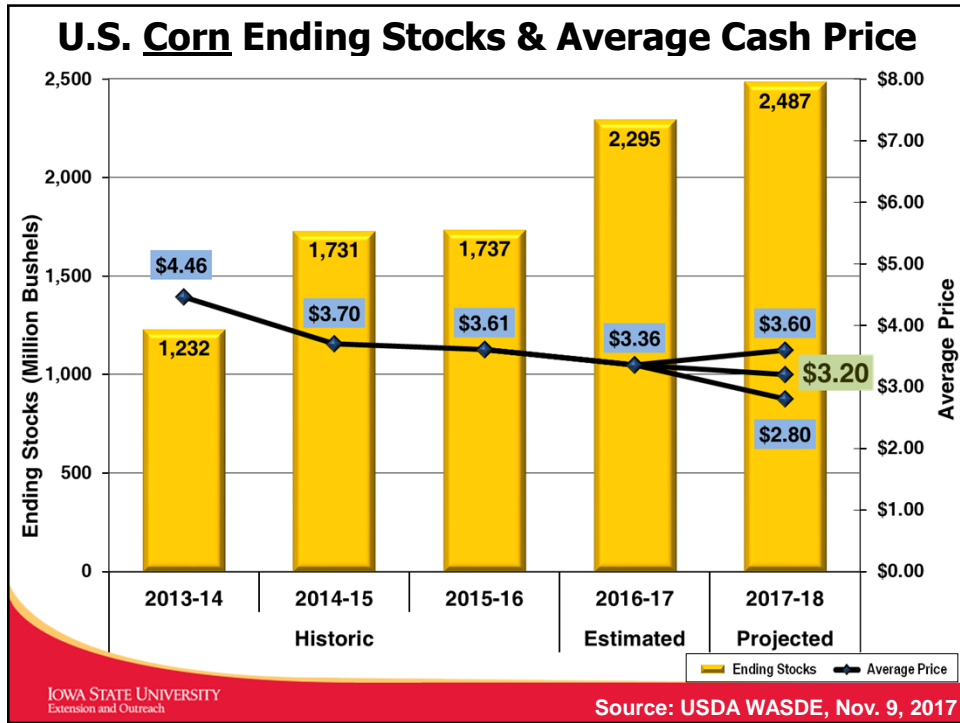
Source: Johnson, ISU Extension, November 2017

Magnify: Pre-Harvest Crop Sales



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Source: Frontier Farm Credit, November 2017



U.S. Corn Supply and Use

		2013	2014	2015	2016	2017
Area Planted	(mil. acres)	95.4	90.6	88.0	94.0	90.4
Yield	(bu./acre)	158.1	171.0	168.4	174.6	175.4
Production	(mil. bu.)	13,829	14,216	13,602	15,148	14,578
Beg. Stocks	(mil. bu.)	821	1,232	1,731	1,737	2,295
Imports	(mil. bu.)	36	32	68	57	50
Total Supply	(mil. bu.)	14,686	15,479	15,401	16,942	16,922
Feed & Residual	(mil. bu.)	5,040	5,280	5,114	5,463	5,575
Ethanol	(mil. bu.)	5,124	5,200	5,224	5,439	5,475
Food, Seed, & Other	(mil. bu.)	1,369	1,401	1,424	1,452	1,460
Exports	(mil. bu.)	1,920	1,867	1,901	2,293	1,925
Total Use	(mil. bu.)	13,454	13,748	13,664	14,647	14,435
Ending Stocks	(mil. bu.)	1,232	1,731	1,737	2,295	2,487
Season-Average Price	(\$/bu.)	4.46	3.70	3.61	\$3.36	\$3.20

IOWA STATE UNIVERSITY Extension and Outreach Source: USDA WASDE, Nov. 9, 2017

2018 Livestock Outlook

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Source: Jim Robb, Livestock Marketing Information Center, November 2017

2018 Livestock Outlook

- Strong domestic and export demand for protein
- Positive outlook
- Increasing production
- Growing feed demand



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Source: Jim Robb, Livestock Marketing Information Center, November 2017

Comparing Storage to 4 Crop Marketing Tools

5. Basis Contract: Sell Cash, Buy July Futures

1. Store Grain Unpriced until Late June (On-Farm vs. Commercial Storage)

4. Minimum Price Contract: Sell Cash, Buy a July Call Option (ATM)

2. Storage Hedge: Store, Sell July Futures or Forward Contract/HTA for July Delivery

3. Store Bushels: Buy a July Put Option (ATM)

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Source: Johnson, ISU Extension, November 2017

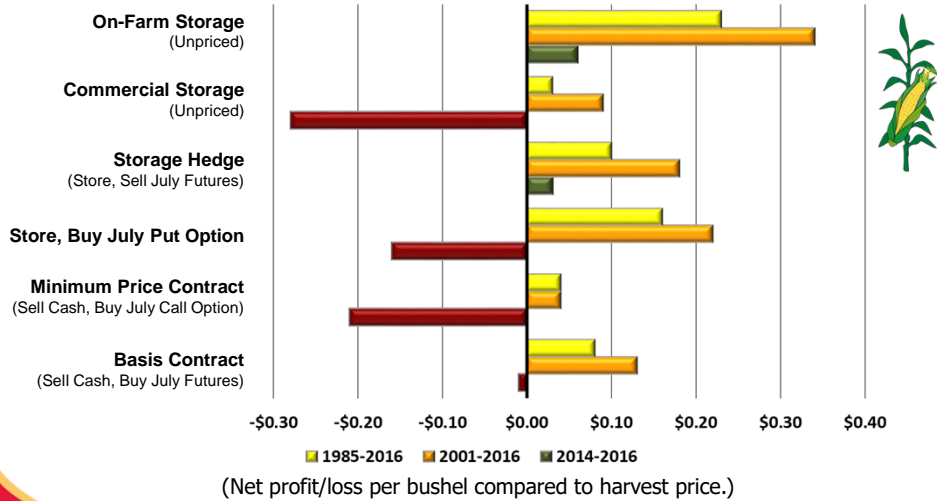
Comparing Storage Study (Assumptions)

- Bar graphs show the results of different storage versus marketing tools during the 1985 - 2016 crop years.
- On-farm storage includes interest charge on stored grain using prevailing operating and CCC loan rates.
- Handling charges are 1 to 2 cents per month for on-farm storage, 2.5 to 5 cents per month for commercial storage.
- Figures do not include depreciation on grain bins and equipment.
- All positions are initiated the first week of October and liquidated upon expiration of July options for corn and soybeans in late July.
- Brokerage commissions and slippage figured at \$100 per round trip, or two cents per bushel.

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Comparing Corn Storage to Marketing Tools

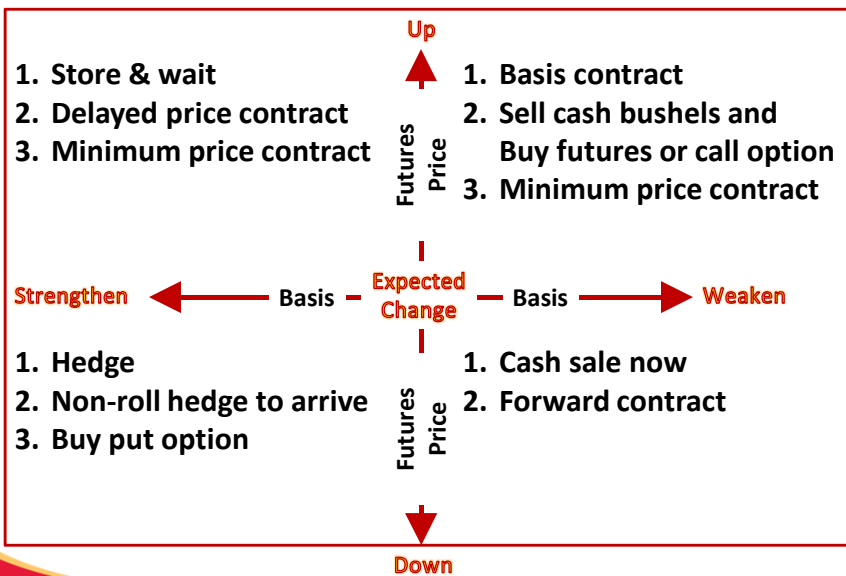
(NC Iowa Terminal Elevator 32-year, 16-year vs. 3-year)



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Source: Knorr, *Farm Futures Magazine*, Sept. 2017

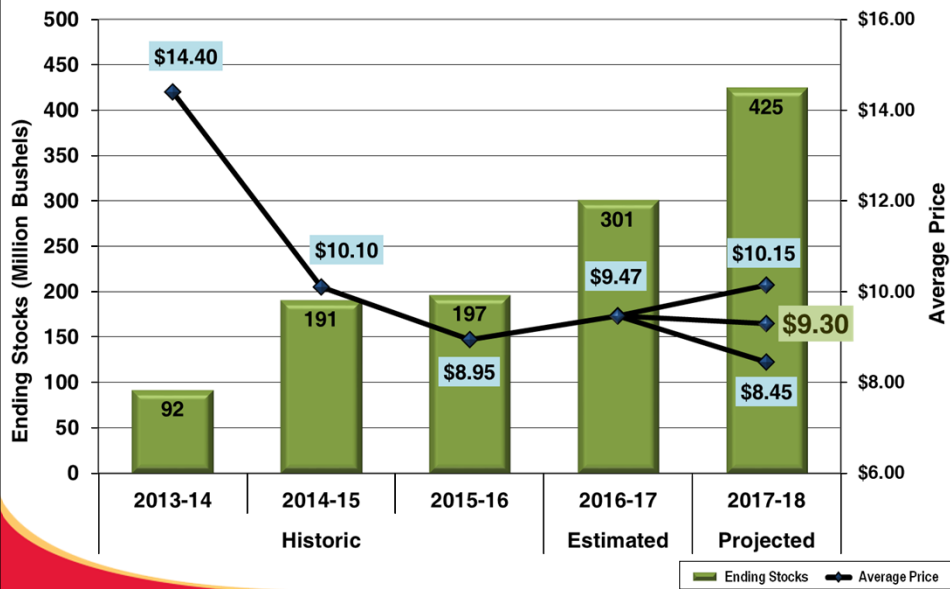
Crop Marketing Matrix



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Source: Iowa Commodity Challenge, November 2017

U.S. Soybean Ending Stocks & Average Cash Price



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Source: USDA WASDE, Nov. 9, 2017

U.S. Soybean Supply and Use

		2013	2014	2015	2016	2017
Area Planted	(mil. acres)	76.8	83.3	82.7	83.4	90.2
Yield	(bu./acre)	44.0	47.5	48.0	52.0	49.5
Production	(mil. bu.)	3,358	3,927	3,926	4,296	4,425
Beg. Stocks	(mil. bu.)	141	92	191	197	301
Imports	(mil. bu.)	72	33	24	22	25
Total Supply	(mil. bu.)	3,570	4,052	4,140	4,515	4,752
Crush	(mil. bu.)	1,734	1,873	1,886	1,899	1,940
Seed & Residual	(mil. bu.)	107	146	115	141	136
Exports	(mil. bu.)	1,638	1,842	1,942	2,174	2,250
Total Use	(mil. bu.)	3,478	3,862	3,944	4,214	4,326
Ending Stocks	(mil. bu.)	92	191	197	301	425
Season-Average Price	(\$/bu.)	13.00	10.10	8.95	\$9.47	\$9.30

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Source: USDA WASDE, Nov. 9, 2017

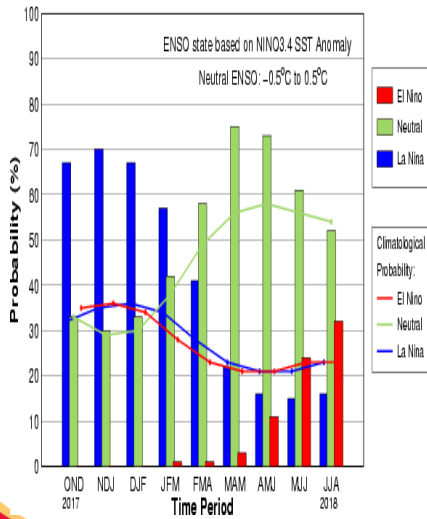
2018 Crop Weather Outlook

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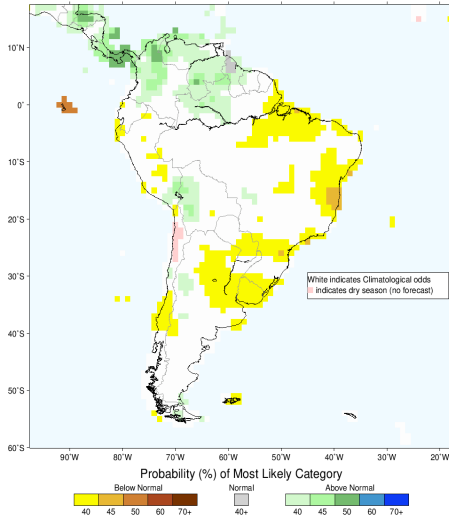
Source: Bryce Anderson, DTN Meteorologist, November 2017

2018 Crop Weather Outlook

Mid-Oct IRI/CPC Model-Based Probabilistic ENSO Forecast



IRI Multi-Model Probability Forecast for Precipitation for November-December-January 2018, Issued October 2017



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Source: Bryce Anderson, DTN Meteorologist, November 2017

November Soybean Seasonal Trends (2000-2017 futures indexed)



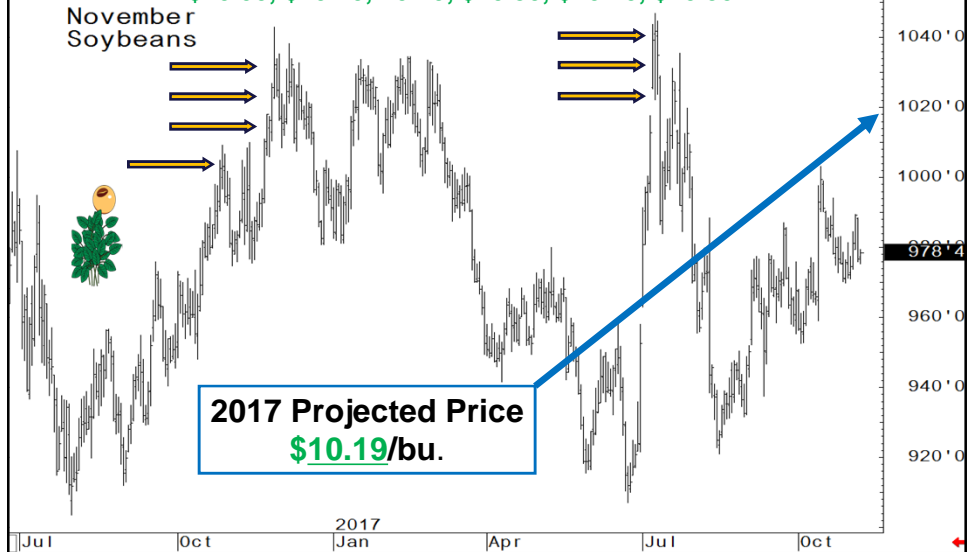
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Source: www.cfm.umn.edu, Usset, October 2017

November 2017 Soybean Marketing Plan

Scale-in incremental sales:

\$10.00, \$10.10, 10.20, \$10.30, \$10.40, \$10.50?

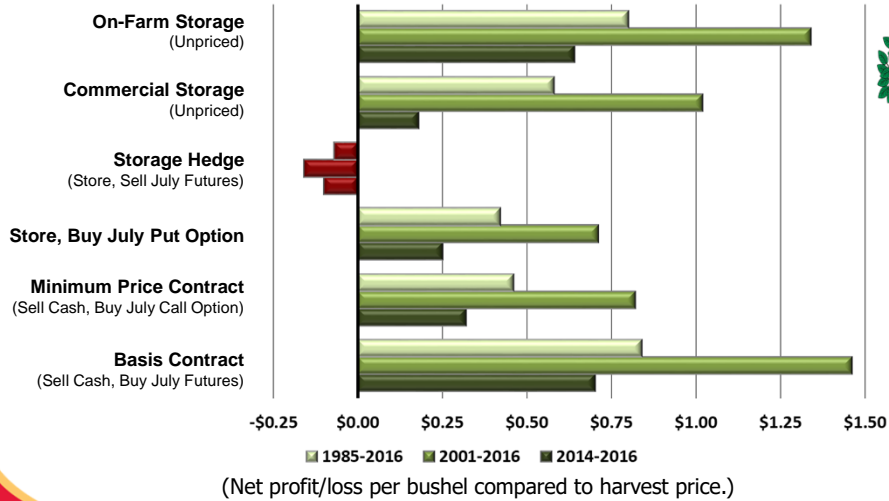


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Source: www.cmegroup.com, Nov. 3, 2017

Comparing Soybean Storage to Marketing Tools

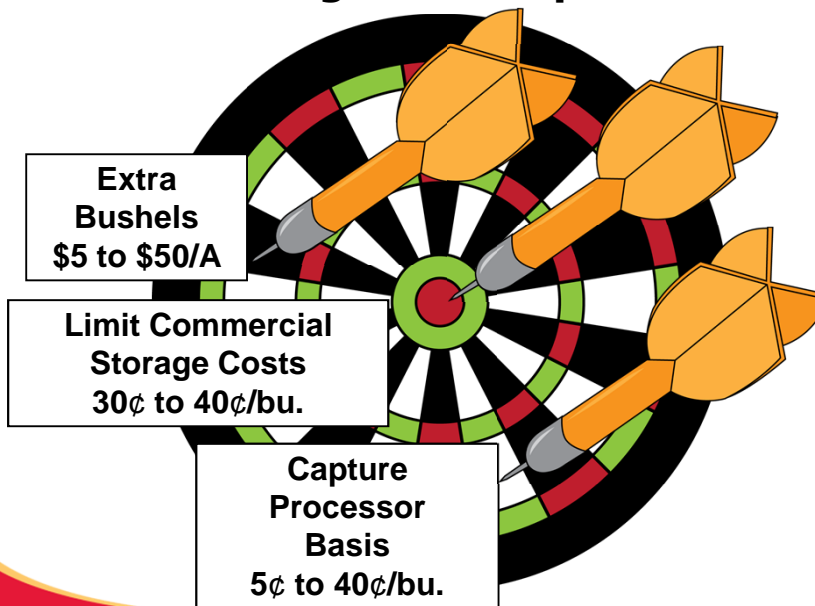
(NC Iowa Terminal Elevator 32-year, 16-year vs. 3-year)



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Source: Knorr, *Farm Futures Magazine*, Sept. 2017

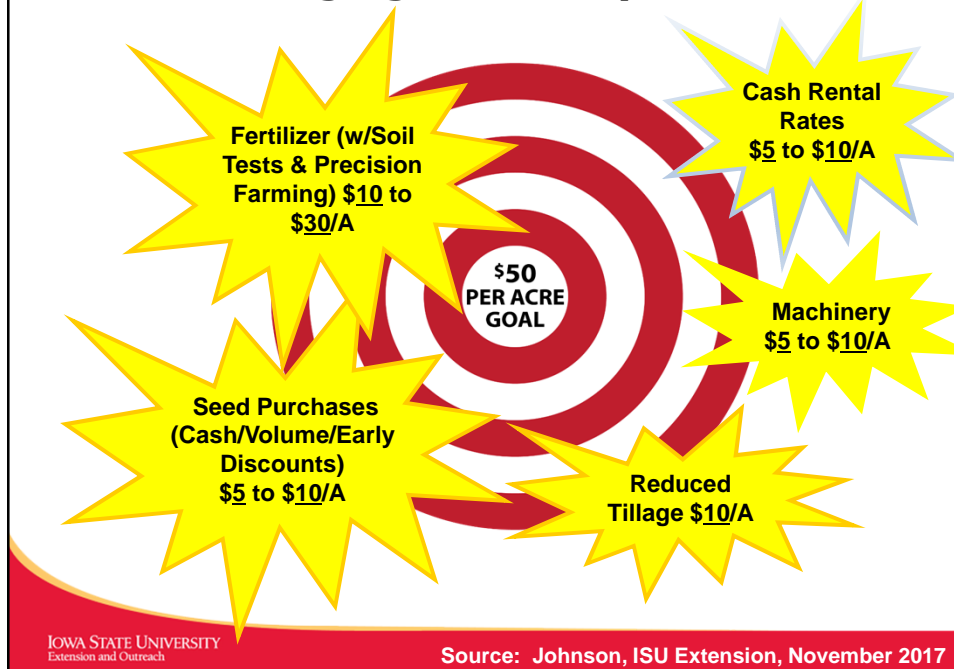
Maximizing 2017 Crop Revenue



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Source: Johnson, *ISU Extension*, November 2017

Managing 2018 Crop Costs



Solutions for Tight 2018 Profit Margins

Develop a Call to Action:
Utilize a Systems Approach, expand your use of farm financial management tools

Control Costs:
Good records, calculate breakevens, monitor farm & family expenses

Manage Inputs:
Renegotiate cash rents, soil test, seek early-pay/cash discounts, calculate ROIs before investing

Merchandise Grain:
Develop a plan with time & price objectives, make pre-harvest sales to meet fall/winter cash flow

Faith, Focus & Follow Through:
Controlling the Crop Controllables

Solutions for Success Websites

- **ISU Extension - Ag Decision Maker**
(Monthly Newsletter, Decision Tools, Iowa Commodity Challenge with videos, Marketing Tools Workbook, etc.)
www.extension.iastate.edu/agdm
- **Iowa Farm Outlook & News** (Monthly Newsletter)
www.econ.iastate.edu/ifo
- **Livestock Marketing Information Center**
www.lmic.info
- **ISU Polk County Ext. Farm Management**
www.extension.iastate.edu/polk/farm-management
- **Farm Credit Services of America**
www.fcsamerica.com