

Mastering Margins Post Crash

Attention to Details

The Business Approach



Manage Risk and Recognize Opportunities

- Your operation, observations, and land rents.
- Cost of production and trend analysis strategies
- Decision making and scenario planning
- Lender concerns for the next few years
- Equipment costs / per acre and efficiency management
- Manage risk - setting goals and taking action



Opportunities for Collaboration

- Average age of the producer is 65 PLUS.
- Technology is/has surpassed many.
- Demand -**Supply** (Ethanol, China, Exports, Food,& Feed)
- Limited Land Availability (Decreasing Resource)
- Market Volatility (Production, Exports, Dollar, Oil, Funds \$\$)
- Limited Capital within individual farms
- Efficiency of Scale
- Less Government Support
- Synergy-(Can't be good at everything)
- Disability Insurance Or *“Production Assurance”*



Networking Opportunities are Everywhere

- How do you communicate with a prospective renter / land owner ?

- Are you making the right statements?

- Are you asking the right questions?



- **Don't Ask:** I'd be interested in renting your farm if the opportunity arises.

- **Do Ask:** I'd like to learn about your operation.



Question #1

1. Do you have a production goal ?

a. Maximize Yields

- * Seed
- * Fertility N P K , Crop Protection
- * Soil Management / Compaction ...Tile, Tillage
- * **Agronomic Focus** “Better Yields = lower Cost/Bu.”



Question #1

1. Do you have a cost reduction goal ?

a. Maximize Savings

- * Seed
- * Fertility N P K
- * Soil Management / Compaction ...Tile, Tillage
- * **Agronomic Focus** “Better Yields = lower Cost/Bu.”



Question #1

This is the Important One!

1. Do you have a Business Plan?



a. Maximize ROI

- * Understand Investment Value by line item.
- * Understand your “Real” Cost of Production I.e. Personal cost
- * Profit Maps instead of Yield maps
- * Profit Centers evaluation (Profit coming from where?)
- * Comprehensive Approach



What to Cut ???

- Look at the biggest “as a percent” expenses first.
 1. Land Rents
 2. Equipment per/ Ac. & Bu.
 3. Increase Yields VRT Fertilizer, N, Seed
 4. Loose ends ?? / Details
 5. Basics i.e. Tile ?
- Return to management
Range \$36/ac. to \$226/ac.



Cash Rent Tracking System

	ISU		Difference	Corn	Cost of	Avg.	Per/ Ac.	Ins.
Crop Year	AVG.	Cash Rent	Cash Rent	Acres	Prod. Corn	Price Corn	Corn Yield	Income
2010	\$192	\$276	\$84	234	\$837	\$4.14	196.2	
2011	\$223	\$276	\$53	234	\$902	\$5.71	192.3	
2012	\$266	\$350	\$84	124	\$951	\$6.47	149.7	\$4,711
2013	\$281	\$375	\$94	110	\$979	\$4.46	197.3	\$8,118
2014	\$277	\$375	\$98	124	\$938	\$3.80	200.0	
2015	\$277	\$325	\$48	234	\$879	\$3.71	209.0	
Averages	\$253	\$330	\$77			\$4.72	190.8	

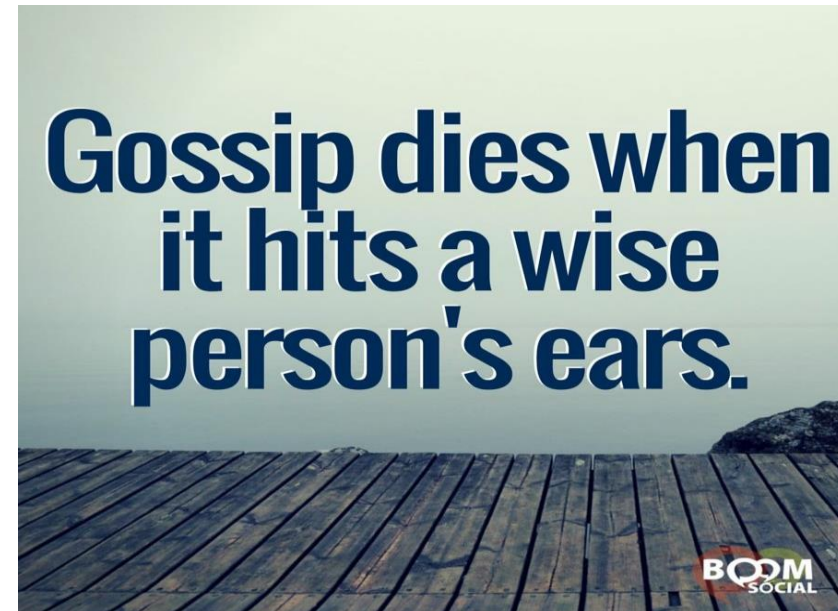
Crop	Gov.	Total	Total	Gross	Gross	
Income	Income	Expense	Income	Profit	Profit / Acre	ROI
\$190,071	\$4,509.18	\$195,858	\$194,580	-\$1,278	-\$5.46	-0.7%
\$256,940	\$4,509.18	\$211,068	\$261,449	\$50,381	\$215.30	23.9%
\$120,101	\$2,389.48	\$117,924	\$127,202	\$9,278	\$74.82	7.9%
\$96,795	\$2,119.70	\$107,690	\$107,033	-\$657	-\$5.97	-0.6%
\$94,240	\$11,408.00	\$116,312	\$105,648	-\$10,664	-\$86.00	-9.2%
\$181,441	\$6,084.00	\$205,686	\$187,525	-\$18,161	-\$77.61	-8.8%
	\$31,019.54			\$4,816	\$19.18	2.1%



Land Rental Values ???

In Tight Margins

- **Feasible ?** “What is the farmer able to pay”
- **Equitable ?** “Good deal for both parties.”
- **Market Value ?** “What the Neighbor is willing to pay.”



Split Crop Land Into 3 Parts



- **1/3 High Profit:** *High Productivity, Consistent, Correct Scale*
- **1/3 Medium Profit:** Medium Productivity, Some Consistency, Location or Scale
- **1/3 Low Profit:** Lower Productivity, Inconsistent, Poor Location or Scale
- **Measure ROI** *Not Just Yield!*
- **Change Program** - OR- Remove “Low/No Profit” farms from the mix.



Define What Growth Means to You.

- ▶ It's not always about more acres / head. Profit??
- ▶ 12,000 to 8,450 acres... now more profit than ever
- ▶ How much money are you leaving on the table?



12,000 acres net income 2 year average \$35.00 = \$420,000

8450 acres net income 2 years average \$72.00 = \$608,400

3,500 less acres =\$188,400 More Net Income!

Measure and Control Growth!



Fastest way to lower Production cost?

- ▶ Increase Yield - Manage Purchase Value - Use Services Opportunities

- ▶ Nitrogen and Potash key yield components (Multi Year)

- ▶ Fertility program – variable rates (Multi Year) i.e. Tile
- ▶ Hybrid selection, technology need, planting rate
- ▶ Fungicide decisions

- ▶ Risk Management

- ▶ Cost of Production
- ▶ Crop Insurance
- ▶ Marketing



Two sides of the “Profit Equation”



Save Money / Lower Cost

- VRT Save \$\$\$ Assuming \$843/ac.
- 2950 acres
- Seed Rate per ac. 36,700
- Seed cost/acre \$129.90
- VRT saved 3% on seed
- Savings \$4.36 \$12,863.43 **1.2% + ROI**
- N P K cost/acre \$151.00
- Assuming 3% improvement on N P & K
- Total \$5.11 /Ac \$15,084.78 **1.4% + ROI**
- **Cost Savings Per Year = \$27,948.21**
- **The gift that keeps on giving! “Repeatable”**
- **10 year Value \$318,000**

Increase Yield / Profit

<i>Margin Enhancement Calculator</i>	
Grain Price	\$4.00
Investment Cost ... per/acre	\$11.00
Yield Enhancement... Bu. per/acre	5.0
Total acres to measure	2,950.00
Total Bu. Improvement	14,750
# of years to apply value	10

Total Investment	\$32,450.00	
Total Value Enhancement	\$59,000.00	
Total Net \$\$ Improvement	\$26,550.00	
Per Acre Improvement	\$9.00	Interest Rate
Bu. Needed to cover cost	2.75	7.0%
Total Value over Time	\$265,500.00	\$366,826.69

Total Value over Time \$684,827

How Yield Effects C-O-P

\$830/ac.

Corn

Producer C-O-P Range

▶ \$2.96 to \$5.14 per Bu. Difference = \$2.18

▶ Yield	Cost per Bu.
180 / Bu.	= \$ 4.64
200 / Bu.	= \$ 4.24 TARGET
160 / Bu.	= \$ 5.14
140 / Bu.	= \$ 5.78



How Yield Effects C-O-P

\$605/ac.

Soybeans

Producer C-O-P Range

▶ **\$7.91 to \$14.02 per Bu. Difference \$6.11**

▶ **Yield Cost per Bu.**

60 / Bu. = \$ 10.10

70 / Bu. = \$ 8.71

50 / Bu. = \$ 12.04

40 / Bu. = \$ 14.97



Make Decisions on Value

- The Check Amount is Top of Mind
- **Considerations:**
 - Bushels needed to cover costs
 - Cost per bushel
 - As a percent of cost
 - Understand value
 - Yield is the key to long term Profit!



Profit Margin is the Bottom Line!!



Field / Farm Name	Total Farm Acres	Corn Acres	Crop Type
Joe Corn Farmer AVG.	2400	800	Corn

1/11/2015

Crop Expenses	Cost Per/ Bu.	% of Margin	Cost Per Acre	BU.	Total Cost	% Cost
Land	\$1.16	3.9%	\$215.00	50.0	\$172,000.00	28.1%
Tax	\$0.00	3.9%	\$0.00	0.0	\$0.00	0.0%
Return to Management	\$0.00	3.9%	\$0.00	0.0	\$0.00	0.0%
Services	\$0.06	3.9%	\$11.00	2.6	\$8,800.00	1.4%
Interest (Operating)	\$0.00	3.9%	\$0.00	0.0	\$0.00	0.0%
Insurance	\$0.10	3.9%	\$19.00	4.4	\$15,200.00	2.5%
Seeds	\$0.62	3.9%	\$115.00	26.7	\$92,000.00	15.0%
Fertilizer + Lime	\$0.30	3.9%	\$55.20	12.8	\$44,160.00	7.2%
Nitrogen	\$0.49	3.9%	\$90.00	20.9	\$72,000.00	11.8%



Chemicals - per/bu.						
\$0.18	Herbicides	3.9%	\$34.00	7.9	\$27,200.00	4.4%
\$0.00	Insecticides/ Fungicide	3.9%		0.0	\$0.00	0.0%
\$0.00	Custom Application	3.9%	\$0.00	0.0	\$0.00	0.0%
\$0.18	Totals		\$34.00	7.9	\$27,200.00	4.4%

Field Operations	Click Here		BU. Needed		% Cost
Chisel / Ripper	3.9%	\$25.78	6.0	\$20,624.00	3.4%
Nitrogen Application	3.9%	\$13.56	3.2	\$10,848.00	1.8%
Field Cultivation	3.9%	\$17.30	4.0	\$13,840.00	2.3%
Planter	3.9%	\$22.21	5.2	\$17,768.00	2.9%
Drill	3.9%	\$0.00	0.0	\$0.00	0.0%
Sprayer	3.9%	\$13.00	3.0	\$10,400.00	1.7%
Combine	3.9%	\$58.80	13.7	\$47,040.00	7.7%
Total Machine Value		\$0.00	0.0	\$0.00	0.0%
Totals	\$0.81	\$150.65	35.0	\$120,520.00	19.7%

Grain Handling Expenses	Per / Acre	Cost Per Bushel			% Cost
Hauling	\$44.40	\$0.24	10.3	\$35,520.00	5.8%
Dryer	\$22.20	\$0.12	5.2	\$17,760.00	2.9%
Storage	\$9.25	\$0.05	2.2	\$7,400.00	1.2%
Totals		\$75.85	per acre	\$60,680.00	9.9%

Total Expenses	\$4.14	\$765.70	\$612,560.00	100.0%
Cost / Per/Bu.		Total Variable expense	\$431,760.00	



Yield / Price	Margin Totals	Farm Totals
Total Bushels Harvested		148,000 bushels
Yield per acre		185 bushels / acre
Market Price	3.9%	\$4.30 per bushel
Government Payment		\$0.00 \$0.00/acre
Other Income		\$0.00 \$0.00/acre
Average Selling Price		\$4.30 per bushel

Economic Results		Farm Totals
Expenses	Bu. needed- Cover Cost	\$612,560.00 Cost / Total
Per Acre	178.1	\$765.70 Cost / Acre
Per Bushel		\$4.14 Cost of Production /Bu
Total Income		\$636,400.00 Income / Total
Per Acre		\$795.50 Income / Acre
per Bushel		\$4.30 Income / Bu.
Income after Insurance Indemnity		
Gross Profit	\$23,840.00	\$23,840.00 Profit / Total
Per Acre	MARGIN -- ROI	\$29.80 Profit / Acre
Per Bushel	3.9%	\$0.16 Profit / Bu.

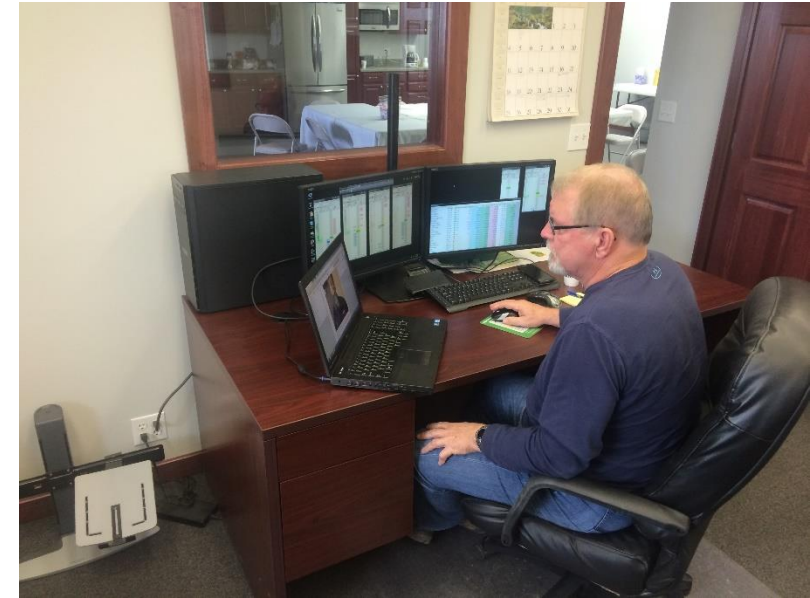


What Are Lenders Concerned About?

Accuracy Considerations.... Things are changing!

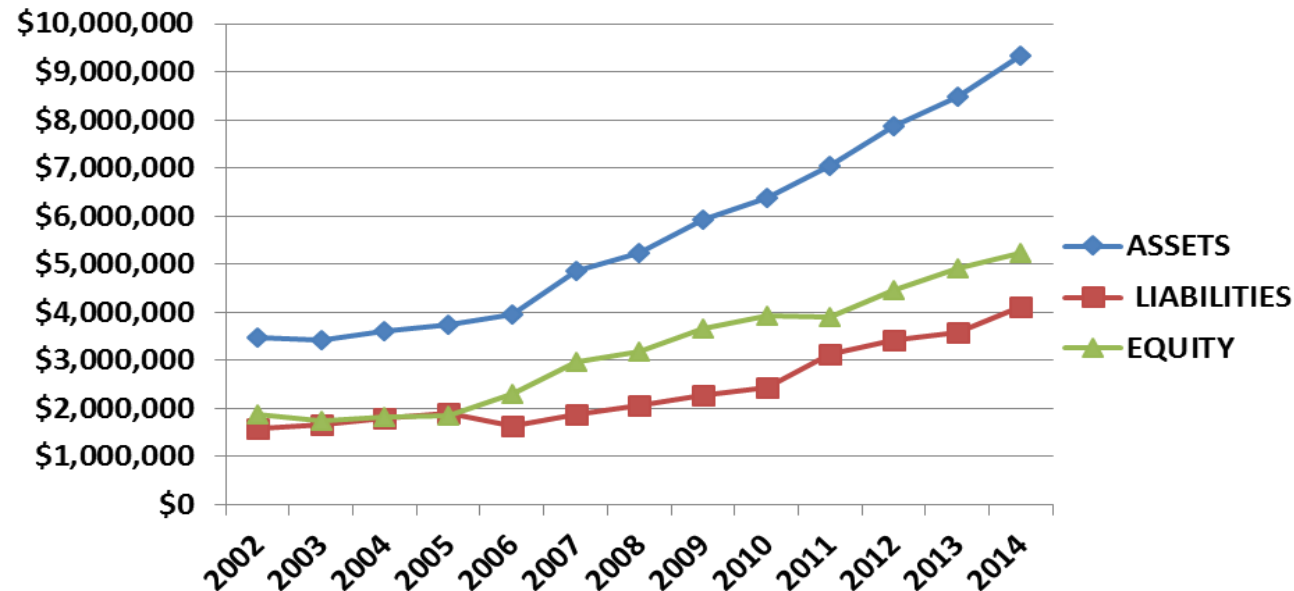
Top Ten List

1. Growing LOC / Prin. & Int. Payments - **Fixed Costs up / Less \$**
2. Cash Flow / Working Capital - **Projected Vs. Actual - CASH is KING**
3. Bank Examiners FDIC - **Outside concern “Land Bubble”**
4. Balance Sheet Inventory - **Volume & Value ??**
5. Balance Sheet Consistency - **Land & Equipment Values**
6. Global / Outside Debt - **Personal Debt**
7. Interest Rates - **LOC & Long Term**
8. Farm Efficiency - **Land vs Equipment / Labor annual cost**
9. Risk Management Plans - **Transition, Insurance, People**
10. Business Structure - **Trends, Sophistication, Stability**



Market Value Balance Sheet Do this every year!!

TOTALS	ASSETS	% CHANGE	LIABILITIES	% CHANGE	EQUITY	% CHANGE
2002	\$3,461,500		\$1,588,256		\$1,873,244	
2003	\$3,407,241	-1.6%	\$1,664,912	4.8%	\$1,742,329	-7.0%
2004	\$3,607,884	5.9%	\$1,789,831	7.5%	\$1,818,053	4.3%
2005	\$3,751,015	4.0%	\$1,908,762	6.6%	\$1,842,253	1.3%
2006	\$3,959,729	5.6%	\$1,646,592	-13.7%	\$2,313,137	25.6%
2007	\$4,854,541	22.6%	\$1,886,018	14.5%	\$2,968,523	28.3%
2008	\$5,226,610	7.7%	\$2,049,006	8.6%	\$3,177,603	7.0%
2009	\$5,922,722	13.3%	\$2,273,193	10.9%	\$3,649,529	14.9%
2010	\$6,366,744	7.5%	\$2,443,728	7.5%	\$3,923,015	7.5%
2011	\$7,039,715	10.6%	\$3,135,324	28.3%	\$3,904,391	-0.5%
2012	\$7,863,996	11.7%	\$3,414,206	8.9%	\$4,449,789	14.0%
2013	\$8,474,703	7.8%	\$3,573,202	4.7%	\$4,901,501	10.2%
2014	\$9,342,755	10.2%	\$4,102,306	14.8%	\$5,240,449	6.9%



Equipment Utilization Efficiency

Understanding your costs and the value



Equipment 2nd Largest Line Item

200 Bu. Corn

Field Operations	Click Here				% Cost
Ripper	3.78%	\$25.78	6.4	\$20,624.00	3.3%
Nitrogen Application	3.78%	\$13.56	3.4	\$10,848.00	1.8%
Field Cultivation	3.78%	\$17.30	4.3	\$13,840.00	2.2%
Planter	3.78%	\$22.21	5.6	\$17,768.00	2.9%
Drill	3.78%		0.0	\$0.00	0.0%
Sprayer	3.78%	\$13.00	3.3	\$10,400.00	1.7%
Zone Management	3.78%	\$18.00	4.5	\$14,400.00	2.3%
	3.78%	\$0.00	0.0	\$0.00	0.0%
Other	3.78%		0.0	\$0.00	0.0%
Combine	3.78%	\$58.80	14.7	\$47,040.00	7.6%
Other	3.78%	\$0.00	0.0	\$0.00	0.0%
Total Machine Value		\$0.00	0.0	\$0.00	0.0%
Totals	\$0.84	\$168.65	42.2	\$134,920.00	21.9%



Know “Your Own” Equipment Cost

This rate schedule is intended only as a guide. Actual custom rates may vary according to availability of machinery in a given area, timeliness, operator skill, field size and shape, crop conditions, and the performance characteristics of the machine being used.

Averages are not good enough!!



Equipment Cost Calculations ?



Machine Cost		Analysis Tool
Machine Titles	<i>JD 8335R JD 1770NT</i>	
Implement Value	\$130,000	
% of use in this operation	100%	
Tractor Value	\$215,000	
% of use in this operation	40%	
Pass Title	<i>Planting corn & soybeans</i>	
Other Expenses - Ins./ Logistics	\$1,200.00	
Avg. Daily hrs. "total per/day"	10.0	
Labor Cost per/hr.	\$20.00	
Fuel Cost per/gal.	\$3.57	
Fuel consumption per/hr. Gal.	9.00	
Fuel consumption per/ac. Gal.	0.30	
Interest, Depreciation, Repairs	25%	
Total Annual Acres this operation.	2,950.0	

Total Machine Value	\$216,000
Fuel Cost per/Acre	\$1.07
Labor Cost per/Acre	\$0.67
Overhead costs per/Acre	\$0.41
Basic Equipment cost/Acre	\$18.31
Total cost/ac.	\$20.45

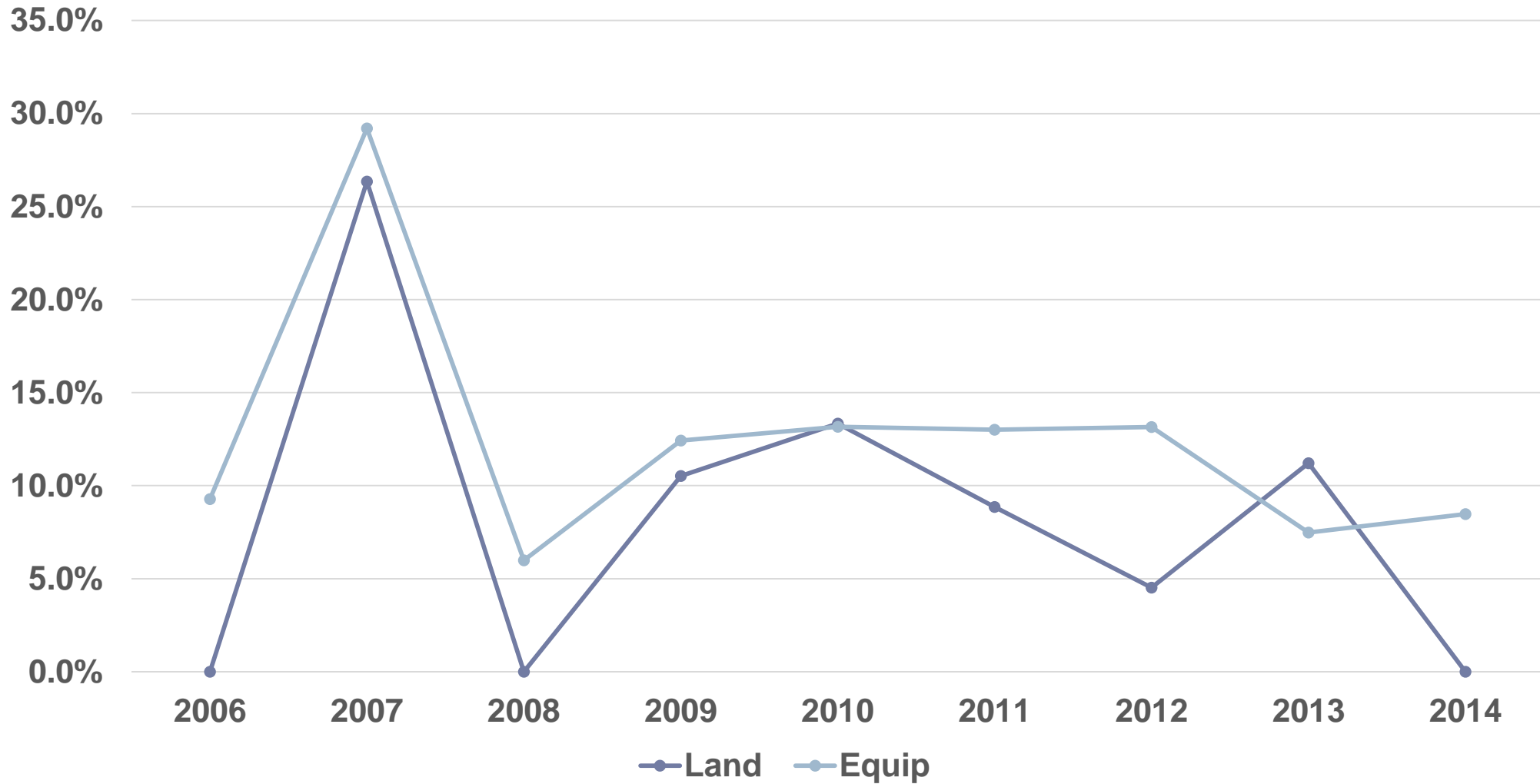


Total Equipment Cost Trends

	Acres	% Increase	Market Value	Invest./Ac.	25% Owner Cost	% Increase	5 Year Increase	10 Year Increase
2005	1670		\$877,243	\$525.30	\$131.32			
2006	1670	0.0%	\$958,623	\$574.03	\$143.51	9.3%		
2007	2110	26.3%	\$1,238,564	\$587.00	\$146.75	29.2%		
2008	2110	0.0%	\$1,312,789	\$622.17	\$155.54	6.0%		
2009	2332	10.5%	\$1,475,970	\$632.92	\$158.23	12.4%	68.3%	
2010	2643	13.3%	\$1,670,203	\$631.93	\$157.98	13.2%		
2011	2877	8.9%	\$1,887,453	\$656.05	\$164.01	13.0%		
2012	3007	4.5%	\$2,135,638	\$710.22	\$177.56	13.1%		
2013	3344	11.2%	\$2,295,428	\$686.43	\$171.61	7.5%		
2014	3344	0.0%	\$2,489,845	\$744.57	\$186.14	8.5%	68.7%	183.8%
	100.2%		Land % Increase				5 Year	10 year



Land & Equipment % Increase Trends



Total Acres	2211
Machine / Hr.	\$65
Fuel / Gal.	\$3.40
Labor / HR.	\$20.00

**Tractor Cost /Productivity
Only = Time, Fuel, Labor**

Without: Interest, depreciation, Repair

<i>Productivity Tracking</i>					<i>Totals</i>		
Machine	Code	Totals	Idle	Work	Transport	Planted/Ac.	Ac/hr.
JD 8335R	C HOURS	146.5	56.5	82	8	2211	15.1
Machine Cost/Hour		\$9,522.50	\$3,672.50	\$5,330.00	\$520.00		
Productivity		100%	39%	56%	5%		
Fuel Consumption		725.5	70.5	581.1	73.9		
Fuel / Per Hr.		5.0	1.2	7.1	9.2		
Fuel Cost		\$2,466.70	\$239.70	\$1,975.74	\$251.26		
Labor Cost		\$2,930.00	\$1,130.00	\$1,640.00	\$160.00		
Logistical Cost		\$1,780.96	\$1,369.70		\$411.26	\$0.81	Per / Ac.
Total Cost/ Fuel Labor		\$5,396.70	\$1,369.70	\$3,615.74	\$411.26	\$2.44	Per / Ac.
Total Cost/ Acre ALL \$		\$14,919.20	\$2,739.40	\$7,231.48	\$822.52	\$6.75	Per / Ac. Total



Decision Example on “Value”

- Purchase 75% 80% or 85% 8,500 acres
- 75% \$76,000 Premium Cost
- 85% \$204,000 Premium Cost *Increased cost \$128,000 OR + \$.08 / Bu. more*
- APH 196
- Final Yield = 186
- Purchased 75% Optional Units
- Indemnity Payment = \$52,000 for 75% Coverage = Net **-\$24,000**
- Indemnity Payment = **\$620,000** for 85% Coverage = **Net \$492,000**



Prioritize to Survive

- Business Structure Review. Know Where the Profit is Coming From. (Profit Center / Zone)
- Consider Networking Options.
- Know your Costs Per/ Bu. on “Every Expense.” *Not Just the Check Amount.*
- Control “Return to Management” Expenses.
- Market Value Balance Sheet with Trends Analysis. “Earned Equity”
- Do What You Do Well. Let someone else do the other stuff.
- Protect Yourself from Risk Insurance.
- Marketing. Keep it Simple and be Disciplined.
- Protect Working Capital. Without Impacting Productivity.



Set Goals

- Where have we been?
- Where are we now?
- Where do we want to be?
 1. Be Specific.
 2. Assign Responsibility
 3. Timeline / Deadline
- What could get in our way?
- What do we need? (Tools, Supplies)
- Set 2-3 not 10
- Do one thing at a time.



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