

## **SOURCES OF DATA**

The 53 producers who provided data for this report have all earned a Minnesota Water Quality Certification from the MN Department of Agriculture. Those producers are located in the 29 of Minnesota's 87 counties. Those counties are highlighted on the map.

### MINNESOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAMS

**Vision:** To provide educational opportunities for students to be successful in a competitive agricultural environment.

**Mission:** To deliver management education for decision-making that achieves an individual's business goals.

### **Guiding Principles:**

- 1. Improved Quality of Life in Rural Communities
- 2. Achievement of Student Goals
- 3. Awareness of the Global Importance of Agriculture
- 4. Integrity in Student Interaction
- 5. Timely and Student-Focused Programming

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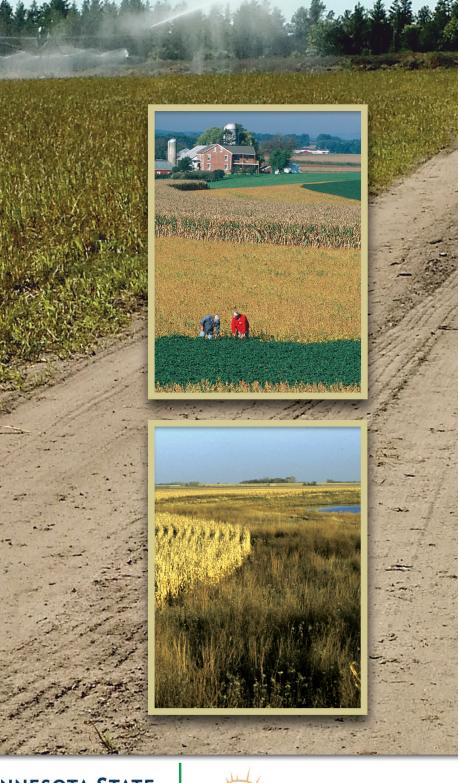
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### MINNESOTA STATE Southern Agricultural Center of Excellence

# INFLUENCE OF INTENSIFIED ENVIRONMENTAL PRACTICES ON FARM PROFITABILITY



MINNESOTA STATE Agriculture Centers of Excellence

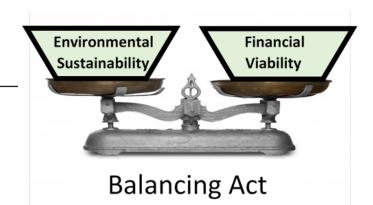
- 2020

AgCentric



### **EXPLORING THE IMPACT OF SELECTED PRACTICES ON FARM ECONOMICS**

There are costs and benefits from implementing farm practices that exceed normal practices in supporting environmental sustainability. Decisions to implement new practices are impacted by the balancing act of Environmental Sustainability and Financial Viability, as shown to the right.





The Environmental Cohort farms were larger in asset value and earned a larger new worth. The owned portion and the lender supported portion of total assets is shown below.

	Environmental	Benchmark	Total Farm Assets		
<b>Balance Sheet (Market)</b>	Cohort (EC)	Average			
	All Farms	All Farms	\$2,000,067 \$1,233,241		
Total Farm Assets	\$3,293,907	\$2,232,039	\$1,293,840 \$998,798		
Total Farm Liabilities	\$1,293,840	\$998 <i>,</i> 798			
Net Worth	\$2,000,067	\$1,233,241	EC Ave Total Farm Liabilities Net Worth		

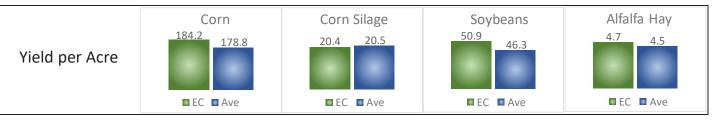
Farms in the Environmental Cohort had a stronger Term Debt Coverage Ratio, 1.61, compared to the overall database, at 1.37. Operating Expense Ratio for the Environmental Cohort was 75.3%, compared to 79.3% for the overall average.

Selected Measures	Environmental Cohort (EC)	Benchma Averag	
	All Farms	All F	
Working Capital as % of GFI	25.1%	2	
Debt to Asset Ratio	47.0%	4	
Term Debt Coverage Ratio	1.61		
Operating Expense Ratio	75.3%	7	

### Crop Enterprises At-A-Glance

Traditional crop enterprises were selected from the primary crops raised by producers in this sort. The enterprises selected include: Corn, Soybeans, Corn Silage, and Alfalfa. Income, expense, and management data has been reduced to the factors listed below for each crop.

Crop Enterprises	Corn		Corn Silage		Soybeans		Alfalfa Hay	
Combined	EC	Ave	EC	Ave	EC	Ave	EC	FBM
Number of Farms	37	1,394	16	354	31	1,286	16	294
Yield per Acre	184.2	178.8	20.4	20.5	50.9	46.3	4.7	4.5
Gross Return/Acre	\$796.22	\$753.47	\$692.54	\$748.63	\$532.36	\$477.55	\$664.27	\$679.07
Fertilizer Expense/Acre	\$118.70	\$128.31	\$76.66	\$96.76	\$25.12	\$22.19	\$42.44	\$51.22
Total Direct Exp/Acre	\$570.67	\$573.75	\$531.56	\$516.37	\$379.29	\$341.59	\$284.11	\$297.55
Net Return/Acre	\$60.22	\$51.04	\$40.57	\$96.29	\$43.30	\$51.27	\$273.26	\$259.23
Cost of Prod w Lbr/unit	\$3.59	\$3.61	\$31.04	\$29.91	\$8.49	\$8.09	\$79.24	\$93.19



### First Look

Identifying a cohort to compare to the benchmarks of current practice can be the most difficult part of providing comparison data. For this sort, the cohort has been defined as: Minnesota Water Quality Certified farms that are a part of the MN FBM state database. This first year document is designed to provide a broad overview of selected financial and production factors that provide a "window" into longer term comparisons. It is a "First Look" and not intended to suggest that a long term trend is represented in this report.

#### Demographics

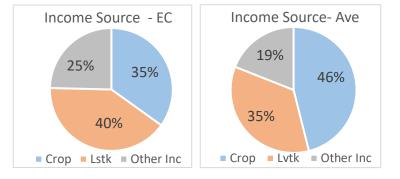
The MN FBM state database included complete financial data from 2167 producers who participate in the Minnesota State Farm Business Management Education (FBM) program. The "Environmental Cohort" consists of 53 of those producers. Below is a comparison of the two groups:

<b>Demographics</b>	Environmental Cohort (EC)	Benchmark Average	Type of Farm - EC	Type of Fai
	All Farms	All Farms	28%	34%
Number of Farms	53	2,167	47%	
Total Crop Acres per farm	666	775		
Total Crop Acres/Cohort	35,298	1,679,425	25%	14%
Age of Operator	49.0	47.1		
Years Farming	24.8	23.0	Crop Dairy All Other	Crop Dairy

### Financials At-A-Glance

To provide a brief financial overview for this report, a limited number of financial factors have been selected. Those factors are taken from the Income Statement, the Market Balance Sheet, and from the approved Farm Financial Standards Measures. That data is shown below:

Income Statement	Environmental Cohort (EC)	Benchmark Average	
	All Farms	All Farms	
Gross Cash Farm Income	\$802,995	\$744,078	
Total Cash Farm Expense	\$658,545	\$645,752	
Net Cash Income	\$144,450	\$98,326	
Inventory Chg/Depreciation	-\$51,629	-\$24,683	
Average Net Farm Income	\$92,821	\$73,643	
Median Net Farm Income	\$40,008	\$33,377	





The environmental cohort has a slightly large average farm size, \$802,995 in Gross Farm Income, compared to \$744,078 for the average farm in the state FBM database. The Net Farm Income comparison is shown on the left.

