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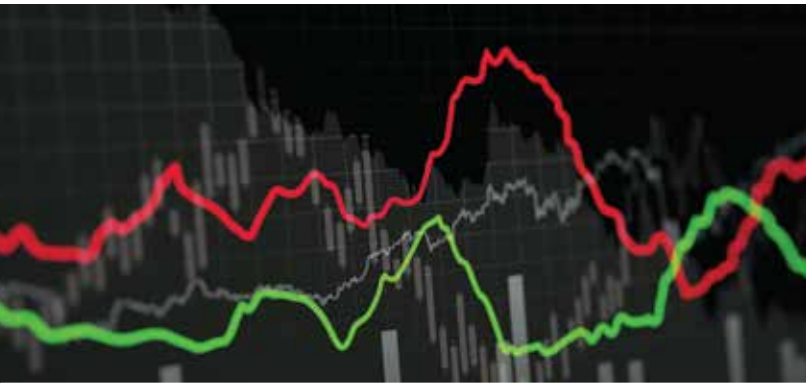
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SOUTHWEST MINNESOTA  
FARM BUSINESS MANAGEMENT ASSOCIATION

# 2020

## ANNUAL REPORT

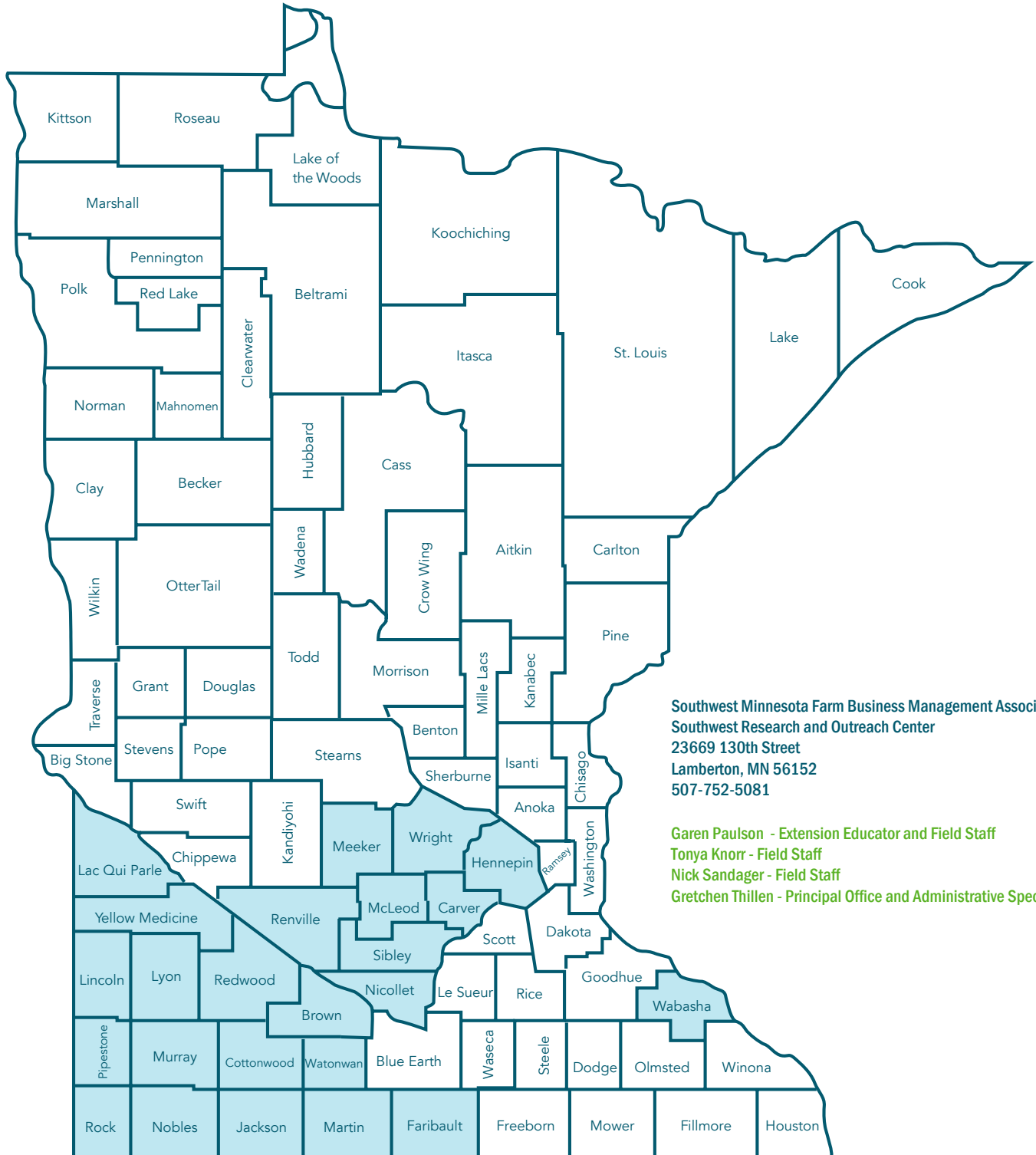


Staff paper #P21-2  
Department of Applied Economics  
University of Minnesota  
Saint Paul, MN 55108  
April 2021

In Cooperation with:

Center for Farm Financial Management · Department of Applied Economics · University of Minnesota Extension  
College of Food, Agricultural and Natural Resource Sciences · University of Minnesota

# SOUTHWEST MINNESOTA FARM BUSINESS MANAGEMENT ASSOCIATION



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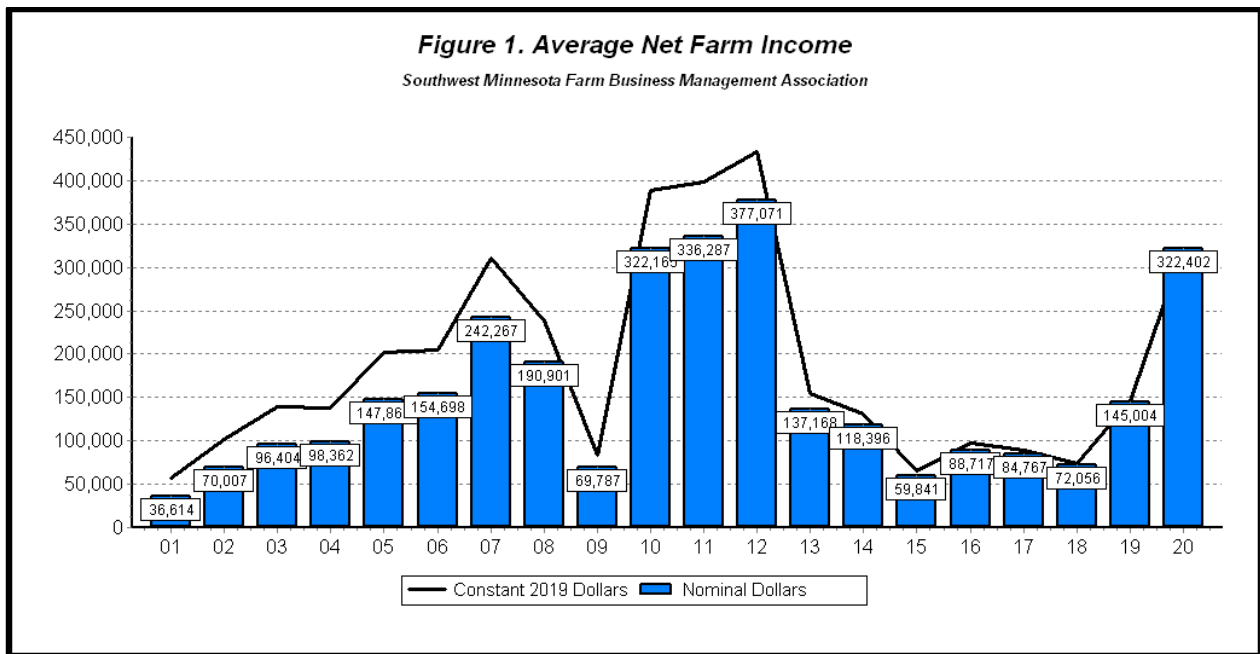
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## Executive Summary

# 2020 Annual Report of the Southwest Minnesota Farm Business Management Association

by Pauline A. Van Nurden, Garen J. Paulson, Tonya L. Knorr, Rachel A. Purdy, Nick Sandager, and Dale W. Nordquist

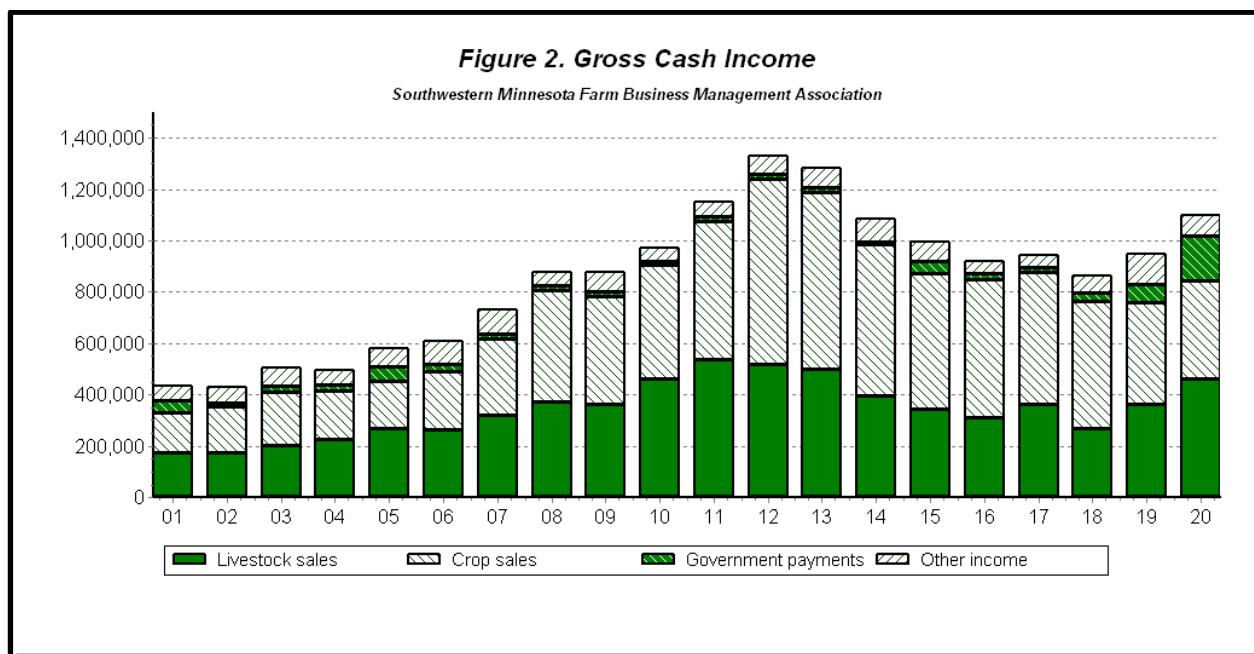
The average net farm income for the 108 farms included in the 2020 annual report of the Southwest Minnesota Farm Business Management Association was \$322,402, up more than 100% from the preceding year. Much of this increased profitability resulted from improved crop prices in the third and fourth quarters of 2020 as well as improved profitability for livestock producers. Government payments related to the impacts of the COVID pandemic were also a big factor. Profits for association members were at their highest levels since 2012. Crop producers saw higher earnings based on above average yields, higher harvest season prices, and increased government payments. Livestock markets were severely impacted by the pandemic especially in the second quarter of the year. Earnings for all types of livestock operations were up primarily because of COVID related government payments. Without those payments, many livestock producers would have suffered severe losses.



Highlights of association financial results for 2020:

- Median net farm income, or the income earned by the middle farm, was \$189,658, up from 91,895 in 2019. This value was below the average net farm income of the group, which is common. This year was like most high income years, where the average net farm income is skewed higher by high profits of larger operations.
- Typically, incomes vary widely around the average and this year is no exception. The average net farm income for the most profitable 20% of the farms was \$937,870 while the least profitable 20% earned \$43,564. This was an improvement from 2019 when the average low

profit farm suffered a loss. As is the case in most high income years, the profits for the high income group were heavily skewed by the earnings of large livestock operations.

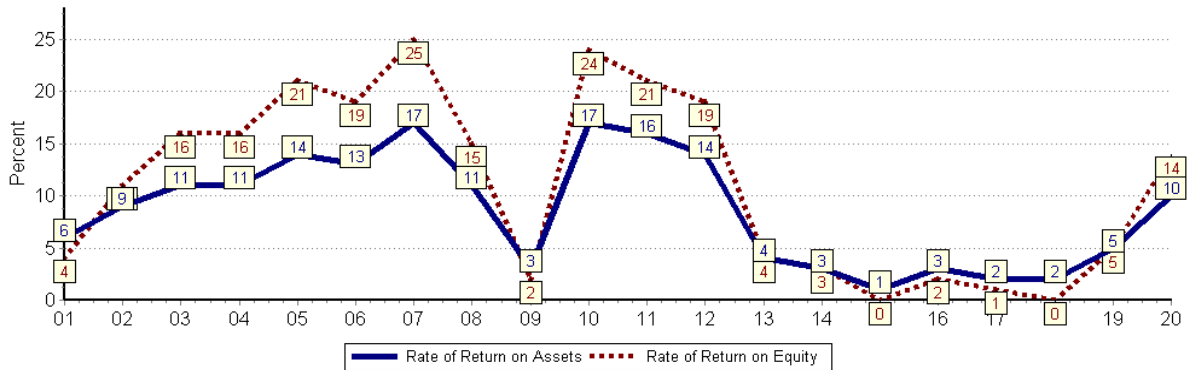


- Average gross cash income was up 16% from 2019. Total cash expenses were up 19%. Crop sales were down 5%, as the actual cash price received for corn was somewhat lower. Livestock sales increased 28% from the previous year. Government payments of all types were up 152%. Given good yields, other miscellaneous income was down 30% primarily due to the reduction in crop insurance income.
- Crops accounted for only 34% of gross sales, down from 42% in 2019. Livestock sales were 42% (Figure 2). Government payments increased by 152% to \$178,798 per farm. These payments accounted for 16% of gross cash income. Payments received included WHIP+ payments related to 2018 and 2019 disasters, ARC and PLC payments that accrue to 2019 production, and PPP loans (if forgiven) and CFAP payments related to the pandemic. Cash receipts also include the final MFP payment related to 2019 trade issues.
- The average farm earned a rate of return on assets (ROA) of 10% with assets valued at adjusted cost or book value. This was the highest ROA for member farms since 2012. Rates of return were historically low from 2013 to 2018 before turning upward in 2019. The average rate of return on equity capital (ROE) was 14%, up from 5% the previous year (Figure 3).
- The average farm reported net worth growth of over \$293,000. Earn net worth change was actually higher, at \$305,000, meaning that net worth growth would have been slightly higher had it not been for reductions in the market value of assets on some farms.
- Member balance sheets remain strong. The debt-to-asset ratio of the average sole proprietor was unchanged at 31% with assets valued at estimated market value. (Figure 4).

- The average farm's working capital improved by over \$190,000 in 2020. The average farm was in a strong working capital position at the end of the year, with working capital to gross revenue of 46%, significantly higher than the often used 30% benchmark for strong liquidity.
- Debt repayment capacity was very strong. The average farm reported a term debt coverage ratio of 4.3:1. A debt repayment coverage position of 4.3:1 means the average farm generated \$4.30 in income from farm and non-farm sources for each \$1.00 of scheduled debt payments.

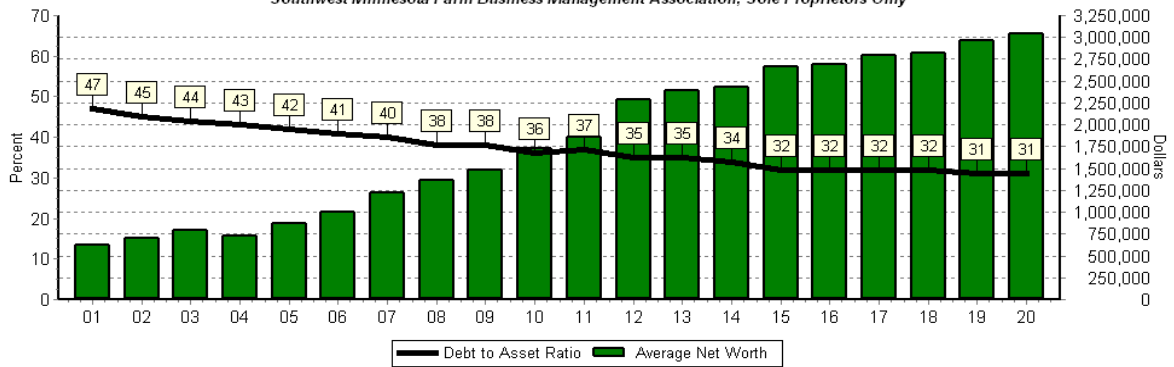
**Figure 3: Rates of Return on Assets (ROA) and Equity (ROE)**

Southwest Minnesota Farm Business Management Association

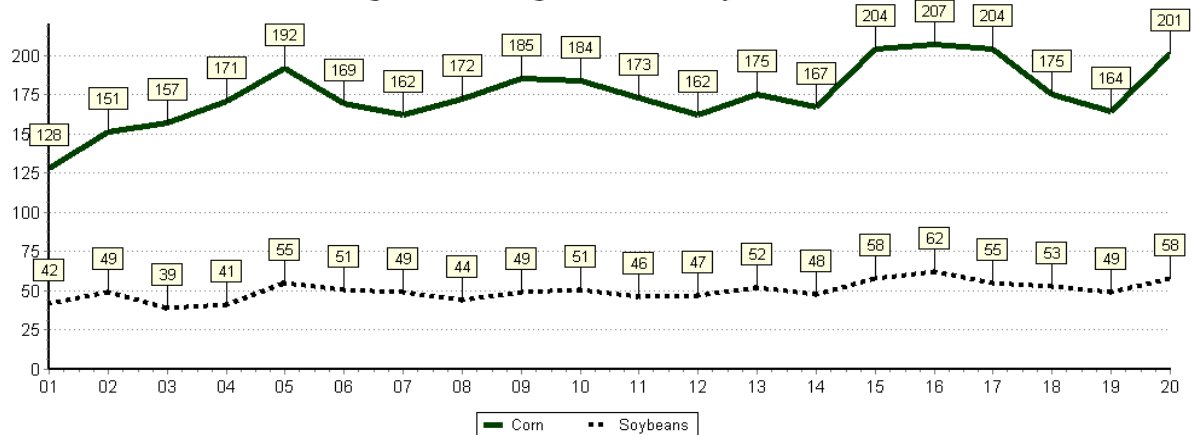


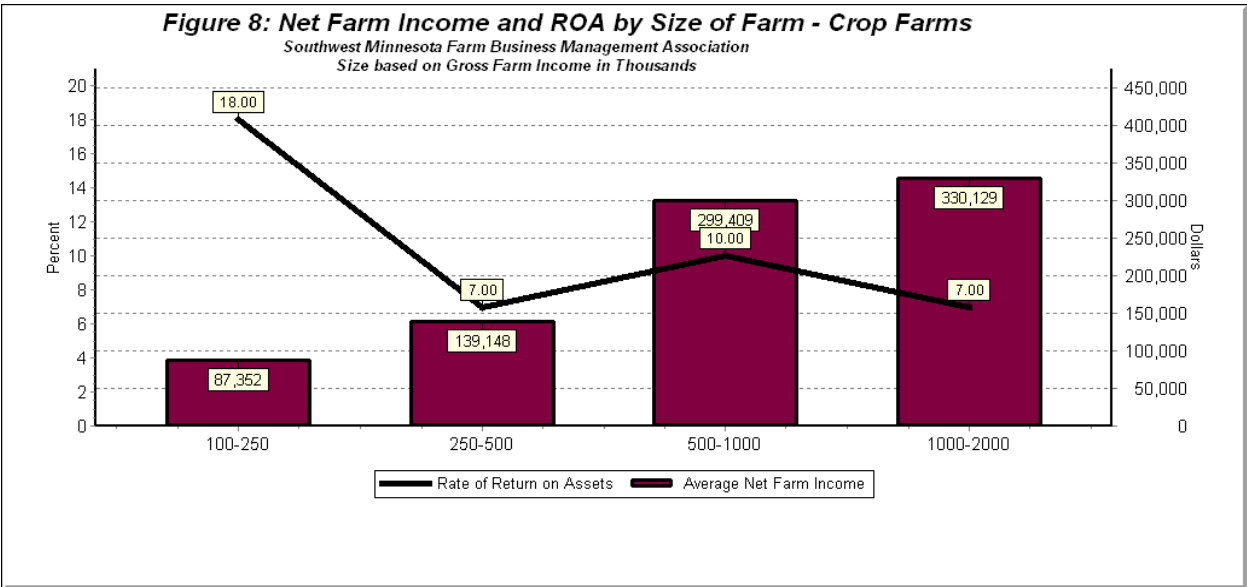
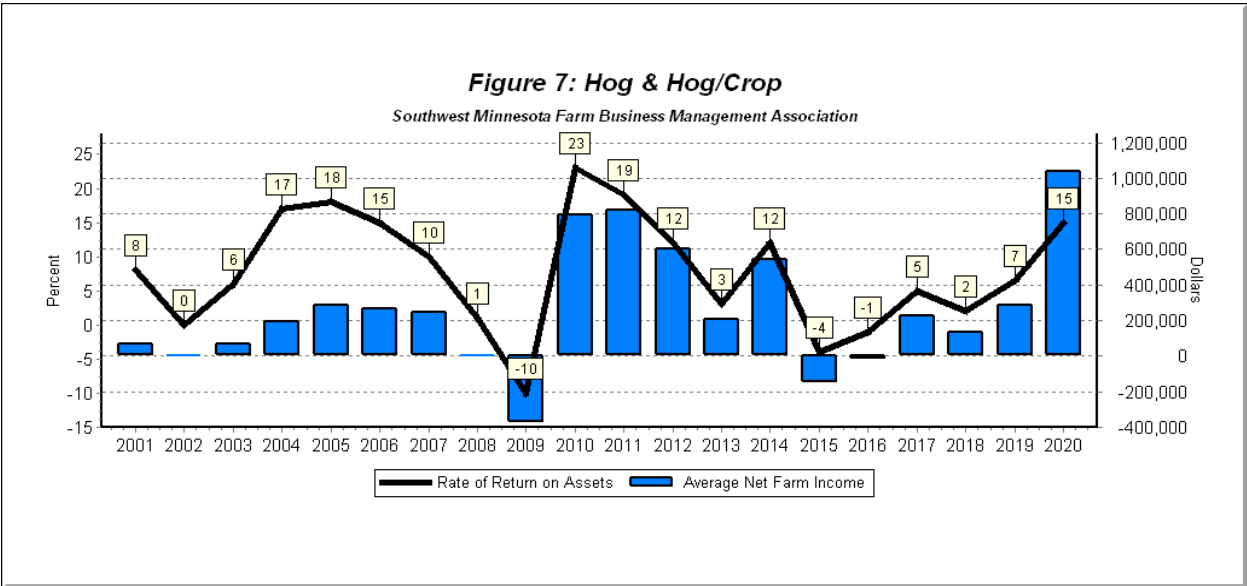
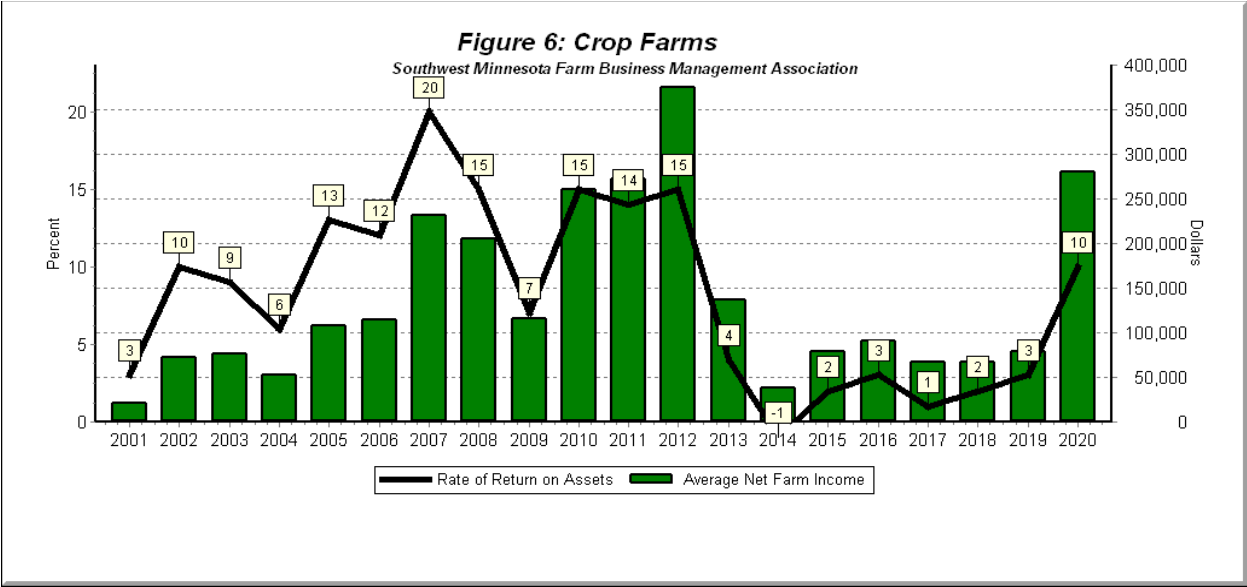
**Figure 4: Ending Equity and Ending Debt to Asset Ratio**

Southwest Minnesota Farm Business Management Association, Sole Proprietors Only



**Figure 5: Average Corn and Soybean Yields**







## Crops

- Crop yields were excellent for association members in 2020. Corn averaged 201 bushels per acre, up sharply from 164 bushels in 2019. By comparison, the average corn yield for the prior ten years was 181 bushels per acre. Soybeans averaged 58 bushels per acre, up from 49 in 2019 and six bushels higher than the prior ten year average for association members.
- Crop sale prices were mixed. Corn was down, at \$3.37 per bushel compared to \$3.58 in 2019. Soybean prices were up, averaging \$9.08 per bushel compared to \$8.46 the previous year. These prices reflect the fact that a large proportion of crop sales are old-crop sales of 2019 production. Those sales were made prior to major rallies in the price of both commodities by the end of the year. By the end of the year, corn prices had risen to over \$4.00 per bushel and soybeans were over \$11.00 on local cash markets. While sales prices do not reflect these increases, they are reflected in year-end inventories, accrual profits, working capital and the ending net worth of association farms.
- The cost to raise an acre of corn (with land rent) was \$680 in 2020, down from \$720 in 2019. Most of the reduction was in direct expenses including seed (down 6%), fertilizer (down 6%), drying, and fuel (down 12%). With mature corn and generally good harvest conditions, drying expense was down \$16.00 per acre. Cash rent per acre declined very slightly. It cost \$519 an acre to produce an acre of soybeans, up slightly from \$513 in 2019. While direct expenses were again down for soybeans, overhead expense increased by 24% for unexplained reasons.
- The cost to produce a bushel of corn on cash rented land was \$3.22 per bushel in 2020, down from \$3.90 in 2019. This takes some explanation though. Production costs were offset by \$95 of government payments, crop insurance, and other miscellaneous income, or about \$0.47 per bushel. Without adjusting for this other income, the cost of production would have been \$3.69 per bushel. High yields also were a major factor in driving down the breakeven cost of production for corn
- It cost \$9.13 to produce a bushel of soybeans, down from \$9.38 in 2019. Again, government and other income offset a large portion of production cost. Without adjusting for government and other miscellaneous income, it would have cost \$9.90 to produce a bushel of soybeans.

## Type of Farm

- The average net farm income for the 66 crop farms in the association was \$280,638, up from \$78,754 in 2019. The major part of this increase was tied up in year-end inventories. Net cash income was actually down from \$163,000 to \$139,000, mostly due to higher whole farm expenses. Interestingly, gross cash income was virtually unchanged with \$132,000 of government payments included. But the value of inventories held at the end of the year increased by almost \$270,000. The average crop farm earned a 10% rate of return on assets (Figure 6). After all costs of production and including allocated government income, association members made an average of \$266 per acre on cash rented corn production and \$154 per acre on rented soybean ground.

- Pork producers were again more profitable in 2020. Specialized hog farms and hog/crop farms in the association (those farms with over 70% of gross income from sale of hogs or a combination of hogs and crops) made an average of \$1,035,801 compared to \$283,238 in 2019. It should be emphasized that the average hog producer has an investment of over \$7.5 million so these producers are much larger than the average association member farm. Prices were severely impacted by the pandemic but recovered by the end of the year. Statewide, the average sale price for market hogs decreased to \$47.88 per hundred pounds of live weight, down from \$50.65 in 2019. Much like crop farms, profits were not so much reflective of within year pork prices but more related to inventory increases and COVID related government payments. The average pork producer made \$15 for every \$100 of assets invested (Figure 7).
- There were not enough specialized dairy or beef farms to summarize these farm types.

### **Size of Farm**

- Earnings for crop farms generally increased with farm size, as is typically the case (Figure 8). Crop farms with gross farm incomes over \$1 million had the highest net farm income and the highest median net farm income as well.
- Rates of return were a different story. The smaller crop farms, those that grossed between \$100,000 and \$250,000 earned the highest ROA at almost 18%. ROA's for the larger crop farms ranged from 7 to 10%. While the largest farms, those that grossed between \$1 million and \$2 million had an investment over \$4 million, the smallest farm group averaged much lower investment at only \$636,000 of assets.

### **Debt Level**

- 2020 was a year when leveraging debt paid dividends. The 14 farms with the highest debt-to-assets ratios had the highest average net farm income and the highest rate of return on assets. Net farm income and ROA generally increased with the amount of debt employed. This is common in a very profitable year. Debt generally multiplies returns in high profit times, but of course, the opposite is also true; debt multiplies losses in low income periods.
- Of the 108 farms in the report, 68 had debt-to-assets under 40% and 36 had ratios over 40%. Those farms with debt-to-assets 40% and lower had the strongest liquidity and repayment capacity but those with higher debt levels made big improvements in their working capital and overall financial positions.

### **Operator Age**

- There were 27 farms whose principle operator was 40 years of age or less among the 106 farms included in the report.
- The 52 farms whose principal operator was over the age of 60 saw the highest average net farm income of the group in 2020, but farms in all age groups made solid profits, with the exception of those under 31 years of age. ROA's were highest for those farmers between 30 and 50 years of age.

## Projected Profitability

The Projected Profitability report displays actual results for Minnesota farms in 2020 along with projected financial results for 2021. Projected results are based on the authors' estimates of changes in revenue, operating expenses, interest rates, and asset values. Assumptions are displayed at the bottom of the page. All calculations include SW association farms, as well as farms enrolled in Minnesota State Farm Business Management programs.

- **2020 All Farms Actual** – Average financial results for all farms in 2020. Balance sheet measures reflect the average position of Minnesota farms at the end of the year.
- **2020 Improved Margin Management** – Potential impacts of small changes in farm performance. If Minnesota farms had, on average, improved sales by 5% and cut costs by 5%, the net farm income of the average farm would have increased by nearly 50%.
- **2020 Statewide Crop Farms Actual** – Average financial results for the 1307 crop farms in the Minnesota database for 2020.
- **2021 Statewide Crop Farms Projected** – Even with expected higher crop prices, the average net income for Minnesota crop farms is expected to decrease in 2021 because of reduced government payments and a return to trendline yields. Government payments and other crop income (like crop insurance) are expected to see decreases in this model, as the ad hoc payments related to disasters, trade deficits, and the pandemic are expected to be limited in 2021. Operating expenses are expected to increase somewhat because of higher input and energy costs.
- **2020 Statewide Livestock Farms Actual** – Average financial results for the 612 farmers in the statewide database who received a major portion of their income from livestock and milk sales for 2020.
- **2021 Statewide Livestock Farms Projected** – Statewide livestock farm profits are projected to decrease on average in 2021, primarily due to reduced government payments and higher feed costs. Hog producers are expected to see profitability for the coming year, even with lower government payments and higher input prices, especially feed costs. Dairy and beef producers are expected to see lower revenues based as stagnant to lower prices, coupled with increased operating expenses, like feed. This is expected to lead to lower profits overall for livestock producers in the state in 2021.

The assumptions used to project these results are subjective. We offer these projections as a most likely scenario to help members consider management decisions in a period of tightening margins. Predictions are currently more challenging, as the continued impact of COVID is not known.

## Full Report

The complete report provides additional information on whole farm financial performance as well as detailed information on crop and livestock enterprise profitability. The report also includes whole-farm financial condition and performance by business size, type of farm, debt-to-asset ratio, and age of operator.



# **2020 Annual Report of the Southwest Minnesota<sup>1</sup> Farm Business Management Association**

by

Pauline A. Van Nurden, Garen J. Paulson, Tonya L. Knorr,  
Rachel A. Purdy, Nick Sandager, and Dale W. Nordquist<sup>2</sup>

This report summarizes the individual farm records of the members of the Southwest Minnesota Farm Business Management Association for 2020.

Whole-farm information and enterprise costs and returns are reported. The year-end analysis of the individual farms was performed by the Association fieldstaff using the FINPACK software from the Center for Farm Financial Management. The individual analyses were summarized at the Department of Applied Economics using RankEm Central. In addition to the average of all farms, the averages for the high and low-income groups are also presented. The tables are divided into four major groups: whole-farm information, crop enterprises, livestock enterprises, and summary information. The summary information includes whole farm historical trends and information by farm size, type of farm, debt to asset ratio, and operator age.

Of the 118 farms in the Southwest Association, the data for 108 farms are included in this report. The rest were omitted because the records were incomplete at the time this report was prepared. In addition to this report, members receive an annual farm business analysis; on-farm instructional visits; end-of-year income tax planning and preparation; periodic meetings, tours, and seminars; a monthly newsletter; and other managerial and educational assistance. Each farmer pays an annual fee which covers much of the cost, with the balance defrayed by University of Minnesota Extension and research programs of the University of Minnesota.

The livestock enterprise summaries include data from both Southwest Minnesota Farm Management Association farms and Minnesota State Farm Business Management program farms. This provides a greater number of instances for each enterprise with the goal of providing more accurate benchmark information. Minnesota State FBM programs are distributed across the state and include over 2,240 participating farms. We thank the Minnesota State FBM program and participating producers for making this data available to be included in this report.

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<sup>1</sup>This report was partially funded by a Farm Business Management and Benchmarking Grant from the USDA National Institute of Food and Agriculture.

<sup>2</sup>Van Nurden, Purdy, and Nordquist are Extension Economists—Center for Farm Financial Management (CFFM), University of Minnesota, Twin Cities; Paulson is an Extension Educator—Ag Business Management for the Association; Knorr and Sandager are financial analysts for the Association. Special thanks to Rann Loppnow, Software Development, CFFM; Katie Carr, Administrative Associate, CFFM; and Gretchen Thillen, Southwest Research and Outreach Center.

**Southwest Minnesota Farm Business Management Association**

**Distribution of Membership -- 2020**

County	Number of Farm Units	Number of Records Submitted
Cottonwood	15	11
Faribault	2	2
Jackson	18	17
Lyon	3	3
Murray	18	17
Nobles	23	19
Pipestone	10	12
Redwood	6	6
Rock	3	5
Wabasha	2	3
Watonwan	7	4
Others	<u>11</u>	<u>4</u>
TOTAL	118	108

**Officers and Directors**

Jason Diemer, President  
Ryan Gravenhof, Vice President  
Justin Keller, Secretary-Treasurer

2020/2021 Southwest Minnesota Farm Business Management Association Directors:  
Russell Gundermann, Jeffrey Luethold, Jesse Nantkes, Jason Tibodeau, Alan Vander  
Lugt, John Volk.

# Southwest Minnesota Farm Business Management Association

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# Whole-Farm Reports

The whole-farm reports summarize the financial performance of member farms in 2020. Each table includes the average of the 108 farms included in the report and the average 20 percent of the farms with the lowest and highest profits (based on Net Farm Income). Appendix I provides detail on how the whole-farm measures are calculated. Below is a short summary of the whole farm reports.

## Financial Summary

The Financial Summary report provides a summary of the key financial measures and ratios included on the other detailed whole farm reports. All profitability and repayment capacity measures are based on accrual adjusted net farm income.

## Financial Standards Measures

The Farm Financial Standards Council recommends farms use these twenty-one measures as standard measures of farm financial performance. Many are repeated from the Profitability, Liquidity, and Balance Sheet tables. For a complete description, see the Financial Guidelines for Agricultural Producers at <http://www.ffsc.org/index.php/order-the-guidelines/>

## Farm Income Statement

The Income Statement calculates the accrual Net Farm Income generated by the average farm for year 2020. Net Farm Income is reported based on accrual adjustments to the cash income and expenses reported for the year. Net Farm Income is the income earned before any compensation for owner labor and management. If owner compensation was included in farm expenses, it has been excluded here to make all farms uniform. Net Farm Income represents the return to the operator's labor, management, and equity capital (net worth). It is the amount the farm contributed to owner family living, income taxes, and net worth growth. However, it does not include any asset appreciation, debt forgiveness or asset repossessions.

There were several different government programs that provided payments to farm operations in 2020. There are several government payment income categories found in the detailed income statement report. The different categories included the following payments:

- Crop government payments – Agriculture Risk Coverage (ARC); Price Loss Coverage (PLC)
- CRP payments – Conservation Reserve Program (CRP).
- Livestock government payments – Dairy Margin Coverage (DMC); Dairy Assistance, Investment, and Relief Initiative (DAIRI) for MN dairy producers.
- Other government payments – loan amounts forgiven for Paycheck Protection Program (PPP); Wildfire and Hurricane Indemnity Program Plus (WHIP+) disaster program; Market Facilitation Program (MFP) 2.0 3<sup>rd</sup> tranche related to trade; Coronavirus Food Assistance Program (CFAP) 1 and 2; Economic Injury Disaster Loan (EIDL) Emergency Advance Program; Emergency Animal Mortality Management program from Environmental Quality Incentives Program (EQIP); MN Small Business Relief grant; MN Coronavirus Aid, Relief, and Economic Security (CARES) Act funding for agriculture.
- Conservation government payments – Environmental Quality Incentives Program (EQIP) payments for annual production expenses; Conservation Stewardship Program (CSP); Soil Health and Income Protection Program (SHIPP).

## **Profitability Measures**

The profitability measures are calculated based on both the cost value of assets and the market value. When calculated based on the market value of assets, the profitability measures can be compared to interest rates and returns available on alternative investments. When based on cost values, the returns more closely estimate the actual returns from the actual investment. (Cost values do not reflect the tax basis of farm assets. Instead, a method of calculating depreciation is used that estimates economic depreciation over the useful life of the assets. )

The *Rate of Return on Assets* (ROA) can be thought of as the interest rate earned by all investment in farm assets. *Rate of Return on Equity* (ROE) is the rate earned on the operator's equity or net worth in the farm business. If ROE is higher than ROA, borrowed funds more than paid for their cost in interest expense. *Operating Profit Margin* measures efficiency in farm operations. The higher the margin, the more of the farm income remained in pockets of the farm operator. *Asset Turnover Rate* measures efficiency in use of capital. Again, the higher the better. Farms with high investment in fixed assets will generally have a lower turnover rate than those who lease a major share of their capital.

## **Liquidity and Repayment Capacity Measures**

Liquidity reflects the ability of the farm to meet its financial obligations on time. *Current Ratio* is current farm assets divided by current farm liabilities. *Working Capital* is current farm assets minus current farm liabilities. Businesses with more working capital are generally in a better position to overcome short-term financial downturns or production problems. *Working Capital to Gross Income* measures liquidity relative to business size.

Repayment capacity measures the ability of the business to meet debt payments and replace capital assets. *Term Debt Coverage Ratio* measures the ability of the business to meet its scheduled debt payments. A term debt coverage ratio greater than 1.0 indicates that the business produced more than enough earnings to meet its scheduled debt payments. *Replacement Coverage Ratio* adds the need for capital replacement. A replacement coverage ratio greater than 1.0 indicates that the business produced more than enough earnings to meet its payments and replace its depreciable assets.

## **Balance Sheets**

Balance sheet reports are included for both the cost and market value of assets. Current assets are identical in both tables, with crop and livestock inventories generally valued at market value. This conforms to the methodology recommended by the Farm Financial Standards Council. On the cost-based table, intermediate and long-term assets are shown at depreciated value using estimated economic, rather than tax, depreciation. On the market table, they are valued at estimated market value.

Liabilities are the same on the cost and market tables except for the inclusion of *Deferred Liabilities* on the market statements. Deferred liabilities are the estimated taxes that would be paid if assets were liquidated at their market values.

*Net Worth Change* on the cost value table is the amount of earned net worth growth or loss for the year. Net worth change on the market value table includes both earned growth and changes in the market valuation of capital assets.

### **Statement of Cash Flows**

The Statement of Cash Flows displays the sources and uses of cash for the year. *Cash From Operating Activities* includes sources and uses of cash related to normal farm operations. *Cash From Investing Activities* reflect cash used to buy and sell capital assets. *Cash From Financing Activities* includes sources and uses of borrowed funds as well as cash from non-farm activities.

### **Crop Production and Marketing**

This table reports farm size in acres farmed, average crop yields for major commodities, and average crop sales prices for the calendar year. Yields and prices are reported for the average of all farms for more commodities than those included in the High and Low columns because a minimum of five farms are required to report the yield or price for any group.

### **Household and Personal Expenses**

This table reports family living and other non-farm expenditures. Only sole proprietors who keep detailed family living records are included.

### **Operator and Labor Information**

All previous tables report results per farm, regardless of the number of families or operators involved in the operation. This report repeats several measures from previous tables on a *Per Operator* basis. It also summarizes estimated labor hours used and labor performance.

### **Non-farm Summary**

This table summarizes non-farm earnings for the average farm and details non-farm assets and liabilities.

### **Projected Profitability**

Based on the past year's results and the authors' estimates of changes in next year's production, prices and costs, this page projects the financial performance of these farms in the coming year.

**Financial Summary**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
<b>Income Statement</b>			
Gross cash farm income	1,099,964	292,515	2,996,480
Total cash farm expense	931,696	237,805	2,701,846
Net cash farm income	168,268	54,710	294,634
Inventory change	221,729	26,732	781,902
Depreciation	-76,433	-34,475	-159,632
Net farm income from operations	313,564	46,967	916,905
Gain or loss on capital sales	8,838	-3,403	20,965
Average net farm income	322,402	43,564	937,870
Median net farm income	189,658	39,757	569,123
<b>Profitability (cost)</b>			
Rate of return on assets	10.1 %	3.3 %	13.5 %
Rate of return on equity	13.6 %	2.6 %	18.4 %
Operating profit margin	28.4 %	9.8 %	34.0 %
Asset turnover rate	35.7 %	33.2 %	39.8 %
<b>Liquidity &amp; Repayment (end of year)</b>			
Current assets	1,023,693	233,557	2,555,203
Current liabilities	422,580	126,924	986,975
Current ratio	2.42	1.84	2.59
Working capital	601,113	106,633	1,568,227
Change in working capital	190,371	35,103	541,343
Working capital to gross inc	46.3 %	33.1 %	42.4 %
Term debt coverage ratio	4.34	2.97	5.44
Replacement coverage ratio	2.79	1.79	3.83
Term debt to EBITDA	1.33	2.53	1.05
<b>Solvency (end of year at market)</b>			
Number of farms	108	21	22
Total assets	4,877,687	2,348,654	10,065,835
Total liabilities	1,703,515	872,618	3,479,069
Net worth	3,174,172	1,476,036	6,586,766
Total net worth change	293,984	111,868	712,022
Farm debt to asset ratio	38 %	40 %	38 %
Total debt to asset ratio	35 %	37 %	35 %
Change in total net worth %	10 %	8 %	12 %
<b>Nonfarm Information</b>			
Net nonfarm income	51,952	85,077	44,070
Farms reporting living expenses	35	8	6
Total family living expense	62,504	53,319	75,626
Total living, invest, cap. purch	100,287	60,140	142,971
<b>Crop Acres</b>			
Total crop acres	906	351	1,850
Total crop acres owned	237	89	429
Total crop acres cash rented	629	262	1,363
Total crop acres share rented	40	-	57
Machinery value per crop acre	474	530	380

**Financial Standards Measures**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
<b>Liquidity</b>			
Current ratio	2.42	1.84	2.59
Working capital	601,113	106,633	1,568,227
Working capital to gross inc	46.3 %	33.1 %	42.4 %
<b>Solvency (market)</b>			
Farm debt to asset ratio	38 %	40 %	38 %
Farm equity to asset ratio	62 %	60 %	62 %
Farm debt to equity ratio	0.62	0.66	0.62
<b>Profitability (cost)</b>			
Rate of return on farm assets	10.1 %	3.3 %	13.5 %
Rate of return on farm equity	13.6 %	2.6 %	18.4 %
Operating profit margin	28.4 %	9.8 %	34.0 %
Net farm income	322,402	43,564	937,870
EBITDA	430,365	97,690	1,159,910
<b>Repayment Capacity</b>			
Capital debt repayment capacity	366,789	97,004	1,025,094
Capital debt repayment margin	282,215	64,363	836,737
Replacement margin	235,118	42,818	757,377
Term debt coverage ratio	4.34	2.97	5.44
Replacement coverage ratio	2.79	1.79	3.83
<b>Efficiency</b>			
Asset turnover rate (cost)	35.7 %	33.2 %	39.8 %
Operating expense ratio	66.8 %	69.7 %	68.6 %
Depreciation expense ratio	5.9 %	10.7 %	4.3 %
Interest expense ratio	3.1 %	5.0 %	2.3 %
Net farm income ratio	24.2 %	14.6 %	24.8 %

*Financial Summary*  
(Farms Sorted By Years)

	<u>Avg. Of All Farms</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
Number of farms	419	104	101	106	108
<b>Income Statement</b>					
Gross cash farm income	965,214	941,931	865,101	946,154	1,099,964
Total cash farm expense	802,322	783,231	703,195	783,687	931,696
Net cash farm income	162,892	158,700	161,907	162,466	168,268
Inventory change	62,167	-7,784	-25,846	52,089	221,729
Depreciation	-72,886	-74,624	-68,737	-71,520	-76,433
Net farm income from operations	152,174	76,292	67,324	143,035	313,564
Gain or loss on capital sales	6,020	8,475	4,732	1,969	8,838
Average net farm income	158,194	84,767	72,056	145,004	322,402
Median net farm income	91,947	40,096	52,423	91,895	189,658
<b>Profitability (cost)</b>					
Rate of return on assets	4.9 %	1.9 %	1.7 %	4.8 %	10.1 %
Rate of return on equity	5.3 %	0.8 %	0.3 %	4.9 %	13.6 %
Operating profit margin	15.5 %	6.5 %	5.9 %	15.7 %	28.4 %
Asset turnover rate	31.5 %	29.7 %	29.0 %	30.7 %	35.7 %
<b>Profitability (market)</b>					
Rate of return on assets	3.8 %	2.6 %	1.8 %	4.2 %	6.2 %
Rate of return on equity	4.5 %	2.7 %	1.3 %	4.8 %	8.5 %
Operating profit margin	17.5 %	12.8 %	9.2 %	19.7 %	24.9 %
Asset turnover rate	21.7 %	20.3 %	19.8 %	21.2 %	25.1 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	854,554	803,844	774,100	808,635	1,023,693
Current liabilities	414,283	436,049	409,125	389,388	422,580
Current ratio	2.06	1.84	1.89	2.08	2.42
Working capital	440,271	367,795	364,975	419,247	601,113
Change in working capital	66,167	-11,429	734	78,098	190,371
Working capital to gross inc	42.9 %	39.4 %	41.9 %	42.3 %	46.3 %
Term debt coverage ratio	2.33	1.27	1.25	2.31	4.34
Replacement coverage ratio	1.51	0.84	0.80	1.49	2.79
Term debt to EBITDA	1.89	2.44	2.65	1.94	1.33
<b>Solvency (end of year at cost)</b>					
Number of farms	419	104	101	106	108
Total assets	3,069,039	2,916,373	2,913,455	2,995,387	3,433,838
Total liabilities	1,007,499	988,053	960,176	975,256	1,102,126
Net worth	2,061,540	1,928,320	1,953,279	2,020,132	2,331,712
Net worth change	142,159	48,138	58,396	148,214	305,090
Farm debt to asset ratio	36 %	37 %	36 %	36 %	35 %
Total debt to asset ratio	33 %	34 %	33 %	33 %	32 %
Change in earned net worth %	7 %	3 %	3 %	8 %	15 %
<b>Solvency (end of year at market)</b>					
Number of farms	419	104	101	106	108
Total assets	4,406,727	4,196,248	4,184,664	4,344,977	4,877,687
Total liabilities	1,546,007	1,505,682	1,479,646	1,488,321	1,703,515
Net worth	2,860,720	2,690,566	2,705,017	2,856,656	3,174,172
Total net worth change	174,148	111,911	76,160	206,481	293,984
Farm debt to asset ratio	38 %	39 %	38 %	38 %	38 %
Total debt to asset ratio	35 %	36 %	35 %	34 %	35 %
Change in total net worth %	6 %	4 %	3 %	8 %	10 %
<b>Nonfarm Information</b>					
Net nonfarm income	44,776	38,552	41,141	47,034	51,952
Farms reporting living expenses	153	45	34	39	35
Total family living expense	67,870	69,964	72,096	66,585	62,504
Total living, invest, cap. purch	107,073	116,348	110,123	99,802	100,287
<b>Crop Acres</b>					
Total crop acres	933	940	947	940	906
Total crop acres owned	234	233	233	233	237
Total crop acres cash rented	653	661	665	659	629
Total crop acres share rented	45	46	48	48	40
Machinery value per crop acre	748	763	747	734	748

*Financial Standards Measures  
(Farms Sorted By Years)*

	<u>Avg. Of All Farms</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
Number of farms	419	104	101	106	108
<b>Liquidity</b>					
Current ratio	2.06	1.84	1.89	2.08	2.42
Working capital	440,271	367,795	364,975	419,247	601,113
Working capital to gross inc	42.9 %	39.4 %	41.9 %	42.3 %	46.3 %
<b>Solvency (market)</b>					
Farm debt to asset ratio	38 %	39 %	38 %	38 %	38 %
Farm equity to asset ratio	62 %	61 %	62 %	62 %	62 %
Farm debt to equity ratio	0.62	0.64	0.62	0.61	0.62
<b>Profitability (cost)</b>					
Rate of return on farm assets	4.9 %	1.9 %	1.7 %	4.8 %	10.1 %
Rate of return on farm equity	5.3 %	0.8 %	0.3 %	4.9 %	13.6 %
Operating profit margin	15.5 %	6.5 %	5.9 %	15.7 %	28.4 %
Net farm income	158,194	84,767	72,056	145,004	322,402
EBITDA	264,222	185,965	173,551	258,118	430,365
<b>Repayment Capacity</b>					
Capital debt repayment capacity	193,001	109,183	99,097	187,647	366,789
Capital debt repayment margin	110,055	23,019	19,549	106,279	282,215
Replacement margin	64,995	-21,026	-25,293	62,091	235,118
Term debt coverage ratio	2.33	1.27	1.25	2.31	4.34
Replacement coverage ratio	1.51	0.84	0.80	1.49	2.79
<b>Efficiency</b>					
Asset turnover rate (cost)	31.5 %	29.7 %	29.0 %	30.7 %	35.7 %
Operating expense ratio	74.3 %	80.1 %	80.1 %	74.0 %	66.8 %
Depreciation expense ratio	7.1 %	8.0 %	7.9 %	7.2 %	5.9 %
Interest expense ratio	3.8 %	3.8 %	4.3 %	4.4 %	3.1 %
Net farm income ratio	14.8 %	8.2 %	7.7 %	14.4 %	24.2 %

Summary Farm Income Statement  
(Farms Sorted By Years)

	Avg. Of All Farms	2017	2018	2019	2020
Number of farms	419	104	101	106	108
Crop sales	444,519	510,971	498,364	396,291	377,506
Crop inventory change	34,529	-7,062	-48,444	-3,243	189,247
Gross crop income	479,048	503,909	449,920	393,049	566,754
Livestock sales	337,604	341,813	240,734	329,212	432,380
Livestock inventory change	14,158	-5,349	21,640	13,554	26,536
Gross livestock income	351,762	336,464	262,374	342,766	458,916
Government payments	76,670	18,951	32,905	70,944	178,798
Other cash farm income	106,421	70,196	93,098	149,706	111,281
Change in accounts receivable	3,200	2,556	22,450	13,026	-23,825
Gain or loss on hedging accounts	-879	-6,947	3,297	7,720	-7,382
Change in other assets	8,024	5,299	2,781	13,506	10,170
Gain or loss on breeding lvst	2,485	2,304	4,229	1,029	2,455
Gross farm income	1,026,730	932,732	871,054	991,746	1,297,167
Cash operating expenses	763,373	749,677	667,269	740,838	888,553
Change in prepaids and supplies	380	3,483	19,733	-4,289	-16,123
Change in growing crops	19	94	-538	491	4
Change in accounts payable	-1,264	-6,487	11,039	-3,412	-5,631
Depreciation	72,886	74,624	68,737	71,520	76,433
Total operating expense	835,394	821,391	766,240	805,148	943,235
Interest paid	38,949	33,554	35,925	42,849	43,143
Change in accrued interest	214	1,495	1,565	714	-2,775
Total interest expense	39,162	35,049	37,490	43,563	40,368
Total expenses	874,556	856,440	803,731	848,711	983,603
Net farm income from operations	152,174	76,292	67,324	143,035	313,564
Gain or loss on capital sales	6,020	8,475	4,732	1,969	8,838
Net farm income	158,194	84,767	72,056	145,004	322,402



**Farm Income Statement**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
<b>Cash Farm Income</b>			
Corn	170,884	92,791	235,718
Corn Silage	5,890	737	21,825
Hay, Alfalfa	2,381	2,183	3,790
Oats	850	128	-
Rye	133	686	-
Sorghum Silage	813	-	2,756
Soybeans	193,713	84,720	339,839
Sugar Beets	481	-	-
Wheat, Spring	573	441	116
Hay	656	453	-
Miscellaneous crop income	1,214	3,203	160
Beef Cow-Calf, Beef Calves	3,185	4,686	7,547
Beef Finishing	48,451	961	12,515
Dairy, Milk	104,569	-	480,735
Dairy, Dairy Calves	1,381	-	6,780
Dairy Replacement Heifers	3,648	-	2,809
Dairy Finishing	11,386	3,472	-
Hogs, Feeder Pig Prod, Feeder Pigs	763	3,922	-
Hogs, Finish Feeder Pigs	5,551	-	-
Sheep, Feeder Lamb Prod, Fdr Lambs	696	-	3,416
Sheep, Market Lamb Prod, Mkt Lambs	1,867	-	-
Hogs, Farrow to Weaning, Weaning P	304	-	1,493
Hogs, Weaning to Finish	248,002	-	1,186,874
Cull breeding livestock	1,163	839	297
Misc. livestock income	2,611	-	7
Crop government payments	33,496	11,684	70,030
CRP payments	932	465	2,414
Livestock govt payments	758	-	2,704
Other government payments	137,158	26,945	397,706
Conservation govt payment	6,454	2,563	9,658
Custom work income	25,041	5,993	46,969
Patronage dividends, cash	9,074	2,176	27,610
Crop insurance income	22,091	2,404	42,899
Contract livestock income	26,321	31,519	23,411
Renewable energy income	1,008	-	-
Farm rental income	8,055	4,607	24,230
Other farm income	18,415	4,935	42,173
<b>Gross Cash Farm Income</b>	<b>1,099,964</b>	<b>292,515</b>	<b>2,996,480</b>

**Farm Income Statement (continued)**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
<b>Cash Farm Expense</b>			
Seed and plants	71,157	29,168	139,966
Fertilizer	64,752	29,437	131,675
Crop chemicals	40,186	10,771	86,312
Crop insurance	14,067	4,897	24,073
Drying expense	2,522	1,504	2,994
Storage	376	522	1,144
Irrigation energy	85	437	-
Packaging and supplies	680	-	3,337
Crop miscellaneous	1,464	566	2,779
Consultants	1,379	718	436
Feeder livestock purchase	112,198	5,215	362,607
Purchased feed	195,547	10,613	832,422
Breeding fees	1,828	179	6,831
Veterinary	9,757	1,980	35,715
Supplies	7,566	660	24,593
Contract production exp.	35,592	-	173,551
Bedding	171	205	-
Interest	43,143	15,022	91,478
Fuel & oil	22,084	7,593	52,132
Repairs	56,503	16,175	124,719
Custom hire	15,238	8,259	33,512
Hired labor	30,965	4,875	99,169
Land rent	129,590	48,624	302,859
Machinery leases	15,530	2,483	53,946
Building leases	4,616	14,562	3,184
Real estate taxes	9,705	4,889	18,385
Farm insurance	13,517	4,991	28,349
Utilities	11,166	4,881	24,834
Hauling and trucking	2,984	478	6,671
Marketing	3,446	1,578	7,383
Dues & professional fees	5,680	2,302	13,732
Purchase of resale items	350	-	-
Miscellaneous	7,853	4,225	13,059
Total cash expense	931,696	237,805	2,701,846
Net cash farm income	168,268	54,710	294,634
<b>Inventory Changes</b>			
Prepays and supplies	16,123	-1,939	37,288
Accounts receivable	-23,825	-2,058	-52,343
Hedging accounts	-7,382	-657	-36,239
Other current assets	-18	-5	-106
Crops and feed	189,247	22,774	622,023
Market livestock	26,536	10,399	104,070
Breeding livestock	2,455	-2,728	17,985
Other assets	10,185	2,168	47,732
Accounts payable	5,631	5	33,389
Accrued interest	2,775	-1,226	8,104
Total inventory change	221,729	26,732	781,902
Net operating profit	389,997	81,442	1,076,537
<b>Depreciation</b>			
Machinery and equipment	-49,150	-22,720	-86,862
Titled vehicles	-3,899	-3,303	-6,590
Buildings and improvements	-23,384	-8,452	-66,180
Total depreciation	-76,433	-34,475	-159,632
Net farm income from operations	313,564	46,967	916,905
Gain or loss on capital sales	8,838	-3,403	20,965
Net farm income	322,402	43,564	937,870

**Profitability Measures**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
<b>Profitability (assets valued at cost)</b>			
Net farm income from operations	313,564	46,967	916,905
Rate of return on assets	10.1 %	3.3 %	13.5 %
Rate of return on equity	13.6 %	2.6 %	18.4 %
Operating profit margin	28.4 %	9.8 %	34.0 %
Asset turnover rate	35.7 %	33.2 %	39.8 %
Farm interest expense	40,368	16,248	83,374
Value of operator lbr and mgmt.	72,842	33,098	147,492
Return on farm assets	281,090	30,117	852,786
Average farm assets	2,770,798	922,152	6,300,852
Return on farm equity	240,722	13,869	769,413
Average farm equity	1,772,373	532,987	4,182,947
Value of farm production	989,072	306,507	2,504,679
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
<b>Profitability (assets valued at market)</b>			
Net farm income from operations	278,338	66,976	732,365
Rate of return on assets	6.2 %	3.4 %	8.1 %
Rate of return on equity	8.5 %	3.8 %	11.4 %
Operating profit margin	24.9 %	16.4 %	26.7 %
Asset turnover rate	25.1 %	20.5 %	30.3 %
Farm interest expense	40,368	16,248	83,374
Value of operator lbr and mgmt.	72,842	33,098	147,492
Return on farm assets	245,864	50,126	668,246
Average farm assets	3,938,574	1,493,455	8,278,535
Return on farm equity	205,496	33,878	584,873
Average farm equity	2,425,334	893,858	5,115,852
Value of farm production	989,072	306,507	2,504,679

**Liquidity & Repayment Capacity Measures**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
<b>Liquidity</b>			
Current ratio	2.42	1.84	2.59
Working capital	601,113	106,633	1,568,227
Working capital to gross inc	46.3 %	33.1 %	42.4 %
Current assets	1,023,693	233,557	2,555,203
Current liabilities	422,580	126,924	986,975
Gross revenues (accrual)	1,297,167	322,335	3,699,708
<b>Repayment capacity</b>			
Net farm income from operations	313,564	46,967	916,905
Depreciation	76,433	34,475	159,632
Personal income	51,952	85,077	44,070
Family living/owner withdrawals	-74,690	-62,952	-111,070
Cash discrepancy	17	183	338
Payments on personal debt	-3,295	-4,442	-3,204
Income taxes paid	-25,099	-14,369	-44,385
Interest on term debt	27,906	12,066	62,808
Capital debt repayment capacity	366,789	97,004	1,025,094
Scheduled term debt payments	-84,574	-32,641	-188,357
Capital debt repayment margin	282,215	64,363	836,737
Cash replacement allowance	-47,098	-21,545	-79,359
Replacement margin	235,118	42,818	757,377
Term debt coverage ratio	4.34	2.97	5.44
Replacement coverage ratio	2.79	1.79	3.83

**Balance Sheet at Market Values**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	108		21		22	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Number of farms						
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	78,600	90,065	36,369	42,918	104,110	110,900
Prepaid expenses & supplies	94,955	111,078	36,180	34,241	234,379	271,667
Growing crops	53	49	162	234	106	0
Accounts receivable	66,848	43,023	6,178	4,121	205,811	153,468
Hedging accounts	13,051	11,261	4,481	2,400	38,605	40,107
Crops held for sale or feed	404,655	593,902	108,044	130,818	795,902	1,417,925
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	147,739	174,275	8,426	18,825	457,067	561,137
Other current assets	54	40	78	0	0	0
<b>Total current farm assets</b>	<b>805,954</b>	<b>1,023,693</b>	<b>199,917</b>	<b>233,557</b>	<b>1,835,980</b>	<b>2,555,203</b>
<b>Intermediate Farm Assets</b>						
Breeding livestock	51,564	53,120	12,195	14,067	179,351	181,335
Machinery and equipment	648,559	688,993	286,159	307,210	1,117,388	1,201,166
Titled vehicles	35,956	37,188	16,927	23,197	70,547	67,769
Other intermediate assets	79,085	84,276	51,637	50,161	311,916	340,096
<b>Total intermediate farm assets</b>	<b>815,164</b>	<b>863,578</b>	<b>366,919</b>	<b>394,634</b>	<b>1,679,202</b>	<b>1,790,366</b>
<b>Long Term Farm Assets</b>						
Farm land	1,489,563	1,586,316	647,582	717,872	2,599,457	2,761,005
Buildings and improvements	574,255	596,671	212,456	212,561	1,423,017	1,481,612
Other long-term assets	60,868	61,087	702	710	215,781	215,448
<b>Total long-term farm assets</b>	<b>2,124,686</b>	<b>2,244,074</b>	<b>860,740</b>	<b>931,143</b>	<b>4,238,255</b>	<b>4,458,064</b>
<b>Total Farm Assets</b>	<b>3,745,804</b>	<b>4,131,345</b>	<b>1,427,576</b>	<b>1,559,334</b>	<b>7,753,436</b>	<b>8,803,633</b>
<b>Total Nonfarm Assets</b>	<b>679,077</b>	<b>746,342</b>	<b>687,207</b>	<b>789,319</b>	<b>1,165,926</b>	<b>1,262,202</b>
<b>Total Assets</b>	<b>4,424,881</b>	<b>4,877,687</b>	<b>2,114,783</b>	<b>2,348,654</b>	<b>8,919,362</b>	<b>10,065,835</b>
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	13,135	10,360	1,826	3,052	20,531	12,427
Accounts payable	39,636	34,004	5,397	5,392	139,368	105,979
Current notes	285,773	309,196	100,590	89,252	523,647	698,917
Government crop loans	0	0	0	0	0	0
Principal due on term debt	56,668	69,020	20,576	29,229	125,549	169,651
<b>Total current farm liabilities</b>	<b>395,212</b>	<b>422,580</b>	<b>128,388</b>	<b>126,924</b>	<b>809,095</b>	<b>986,975</b>
<b>Total intermediate farm liabs</b>	<b>115,946</b>	<b>130,557</b>	<b>45,612</b>	<b>55,447</b>	<b>252,233</b>	<b>294,353</b>
<b>Total long term farm liabilities</b>	<b>457,634</b>	<b>474,922</b>	<b>201,440</b>	<b>220,518</b>	<b>965,526</b>	<b>927,627</b>
<b>Total farm liabilities</b>	<b>968,792</b>	<b>1,028,058</b>	<b>375,440</b>	<b>402,890</b>	<b>2,026,855</b>	<b>2,208,955</b>
<b>Total nonfarm liabilities</b>	<b>63,774</b>	<b>74,068</b>	<b>103,014</b>	<b>163,202</b>	<b>66,556</b>	<b>60,090</b>
<b>Total liabs excluding deferreds</b>	<b>1,032,566</b>	<b>1,102,126</b>	<b>478,453</b>	<b>566,092</b>	<b>2,093,411</b>	<b>2,269,045</b>
<b>Total deferred liabilities</b>	<b>512,127</b>	<b>601,389</b>	<b>272,161</b>	<b>306,527</b>	<b>951,207</b>	<b>1,210,024</b>
<b>Total liabilities</b>	<b>1,544,693</b>	<b>1,703,515</b>	<b>750,615</b>	<b>872,618</b>	<b>3,044,618</b>	<b>3,479,069</b>
<b>Retained earnings</b>	<b>2,026,622</b>	<b>2,331,712</b>	<b>892,860</b>	<b>948,821</b>	<b>4,364,848</b>	<b>5,240,606</b>
<b>Market valuation equity</b>	<b>853,566</b>	<b>842,460</b>	<b>471,308</b>	<b>527,214</b>	<b>1,509,896</b>	<b>1,346,160</b>
<b>Net worth (farm and nonfarm)</b>	<b>2,880,188</b>	<b>3,174,172</b>	<b>1,364,168</b>	<b>1,476,036</b>	<b>5,874,744</b>	<b>6,586,766</b>
<b>Net worth excluding deferreds</b>	<b>3,392,315</b>	<b>3,775,561</b>	<b>1,636,329</b>	<b>1,782,562</b>	<b>6,825,951</b>	<b>7,796,790</b>
<b>Net worth change</b>		293,984		111,868		712,022
<b>Percent net worth change</b>		10 %		8 %		12 %
<b>Ratio Analysis</b>						
Current farm liabilities / assets	49 %	41 %	64 %	54 %	44 %	39 %
Intermediate farm liab. / assets	14 %	15 %	12 %	14 %	15 %	16 %
Long term farm liab. / assets	22 %	21 %	23 %	24 %	23 %	21 %
Total debt to asset ratio	35 %	35 %	35 %	37 %	34 %	35 %
Debt to assets excl deferreds	23 %	23 %	23 %	24 %	23 %	23 %

**Balance Sheet at Cost Values**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Number of farms	108		21		22	
<b>Assets</b>						
Current Farm Assets						
Cash and checking balance	78,600	90,065	36,369	42,918	104,110	110,900
Prepaid expenses & supplies	94,955	111,078	36,180	34,241	234,379	271,667
Growing crops	53	49	162	234	106	0
Accounts receivable	66,848	43,023	6,178	4,121	205,811	153,468
Hedging accounts	13,051	11,261	4,481	2,400	38,605	40,107
Crops held for sale or feed	404,655	593,902	108,044	130,818	795,902	1,417,925
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	147,739	174,275	8,426	18,825	457,067	561,137
Other current assets	54	40	78	0	0	0
Total current farm assets	805,954	1,023,693	199,917	233,557	1,835,980	2,555,203
Intermediate Farm Assets						
Breeding livestock	44,612	46,745	10,990	11,910	160,702	168,471
Machinery and equipment	421,115	440,609	169,097	178,123	748,764	778,703
Titled vehicles	19,777	20,139	10,782	15,318	35,563	34,366
Other intermediate assets	74,006	82,511	44,460	46,723	294,975	334,528
Total intermediate farm assets	559,509	590,003	235,329	252,073	1,240,004	1,316,068
Long Term Farm Assets						
Farmland	800,081	884,117	279,665	339,240	1,592,664	1,760,676
Buildings and improvements	378,667	387,010	156,904	146,206	949,167	967,868
Other long-term assets	56,112	56,450	702	710	192,064	192,010
Total long-term farm assets	1,234,860	1,327,578	437,271	486,155	2,733,894	2,920,554
Total Farm Assets	2,600,323	2,941,274	872,518	971,786	5,809,879	6,791,825
Total Nonfarm Assets	458,865	492,564	498,796	543,127	648,380	717,826
Total Assets	3,059,188	3,433,838	1,371,314	1,514,913	6,458,259	7,509,651
<b>Liabilities</b>						
Current Farm Liabilities						
Accrued interest	13,135	10,360	1,826	3,052	20,531	12,427
Accounts payable	39,636	34,004	5,397	5,392	139,368	105,979
Current notes	285,773	309,196	100,590	89,252	523,647	698,917
Government crop loans	0	0	0	0	0	0
Principal due on term debt	56,668	69,020	20,576	29,229	125,549	169,651
Total current farm liabilities	395,212	422,580	128,388	126,924	809,095	986,975
Total intermediate farm liabs	115,946	130,557	45,612	55,447	252,233	294,353
Total long term farm liabilities	457,634	474,922	201,440	220,518	965,526	927,627
Total farm liabilities	968,792	1,028,058	375,440	402,890	2,026,855	2,208,955
Total nonfarm liabilities	63,774	74,068	103,014	163,202	66,556	60,090
Total liabilities	1,032,566	1,102,126	478,453	566,092	2,093,411	2,269,045
Net worth (farm and nonfarm)	2,026,622	2,331,712	892,860	948,821	4,364,848	5,240,606
Net worth change		305,090		55,961		875,758
Percent net worth change		15 %		6 %		20 %
<b>Ratio Analysis</b>						
Current farm liabilities / assets	49 %	41 %	64 %	54 %	44 %	39 %
Intermediate farm liab. / assets	21 %	22 %	19 %	22 %	20 %	22 %
Long term farm liab. / assets	37 %	36 %	46 %	45 %	35 %	32 %
Total debt to asset ratio	34 %	32 %	35 %	37 %	32 %	30 %

**Statement Of Owner's Equity**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
Beginning net worth	2,880,188	1,364,168	5,874,744
Net farm income	322,402	43,564	937,870
Personal income	51,952	85,077	44,070
Family living/owner withdrawals	-74,690	-62,952	-111,070
Dividends paid	-	-	-
Income taxes (accrued)	-25,099	-14,369	-44,385
Change in personal assets	13,624	-1,948	51,674
Change in nonfarm accounts payable	860	2,565	957
Total change in retained earnings	289,068	52,119	879,455
Capital contributions	3,433	-	8,182
Gifts and inheritances received	17,123	4,037	83
Debts forgiven	-	-	-
Gifts given	-1,516	-194	-4,855
Capital distributions	-3,019	-	-7,136
Total change in contributed capital	16,022	3,843	-3,727
Chg in mkt value of capital assets	78,156	90,272	95,081
Change in deferred liabilities (-)	-89,262	-34,365	-258,817
Total change in market valuation	-11,106	55,907	-163,736
Total change in net worth	293,983	111,868	711,992
Ending net worth calculated	3,174,154	1,475,854	6,586,397
Ending net worth reported	3,174,172	1,476,036	6,586,766
Discrepancy	-18	-182	-368

**Statement Of Cash Flows**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
Beginning cash (farm & nonfarm)	92,057	59,174	110,434
<b>Cash Provided By Operating Activities</b>			
Gross cash farm income	1,099,964	292,515	2,996,480
Total cash farm expense	-931,696	-237,805	-2,701,846
Net cash from hedging transactions	-5,592	1,423	-37,741
Cash provided by operating	162,676	56,133	256,894
<b>Cash Provided By Investing Activities</b>			
Sale of breeding livestock	3,420	983	12,171
Sale of machinery & equipment	23,833	11,652	43,576
Sale of titled vehicles	440	1,063	-
Sale of farm land	8,413	830	39,818
Sale of farm buildings	5,220	8,523	-
Sale of other farm assets	2,103	3	8,976
Sale of nonfarm assets	13,102	10,010	18,191
Purchase of breeding livestock	-3,058	-4,631	-1,955
Purchase of machinery & equip.	-90,815	-46,790	-164,604
Purchase of titled vehicles	-4,758	-8,913	-5,392
Purchase of farm land	-87,321	-60,405	-182,610
Purchase of farm buildings	-34,884	-6,276	-84,881
Purchase of other farm assets	-763	-106	-744
Purchase of nonfarm assets	-31,865	-66,585	-32,593
Cash provided by investing	-196,932	-160,641	-350,046
<b>Cash Provided By Financing Activities</b>			
Money borrowed	655,581	306,861	1,676,414
Principal payments	-580,495	-224,404	-1,458,371
Personal income	51,952	85,077	44,070
Family living/owner withdrawals	-74,690	-62,952	-111,070
Income and social security tax	-21,354	-7,846	-44,342
Capital contributions	3,433	-	8,182
Capital distributions	-3,019	-	-7,136
Dividends paid	-	-	-
Cash gifts and inheritances	17,123	4,037	83
Gifts given	-1,516	-194	-4,855
Other cash flows	-	-	-
Cash provided by financing	47,016	100,579	102,973
Net change in cash balance	12,760	-3,928	9,821
Ending cash (farm & nonfarm)	104,834	55,428	120,593
Discrepancy	-17	-183	-338



**Crop Production and Marketing Summary**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
<b>Acreage Summary</b>			
Total acres owned	226	106	399
Total crop acres	906	351	1,850
Crop acres owned	237	89	429
Crop acres cash rented	629	262	1,363
Crop acres share rented	40	-	57
Total pasture acres	11	-	13
Percent crop acres owned	26 %	25 %	23 %
Mach invest/crop acre cost	474	530	380
Mach invest/crop acre market	748	900	595
<b>Average Price Received (Cash Sales Only)</b>			
Soybeans per bushel	9.08	9.06	9.32
Corn per bushel	3.37	3.35	3.43
Oats per bushel	2.98	-	-
Hay, Alfalfa per ton	112.37	-	-
Corn Silage per ton	41.10	-	-
Hay, Grass per ton	110.23	-	-
Wheat, Spring per bushel	4.04	-	-
<b>Average Yield Per Acre</b>			
Corn (bushel)	201.39	211.38	195.25
Soybeans (bushel)	57.60	59.14	57.61
Corn Silage (ton)	21.09	-	19.38
Hay, Alfalfa (ton)	4.66	-	4.36
Hay, Grass (ton)	2.63	2.37	-
Oats (bushel)	86.56	-	-
Wheat, Spring (bushel)	72.31	-	-

**Household and Personal Expenses**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	35	8	6
Average family size	2.5	2.9	2.0
<b>Family Living Expenses</b>			
Food and meals expense	9,346	8,811	10,385
Medical care	5,801	6,236	5,650
Health insurance	5,798	4,546	4,451
Cash donations	3,992	1,902	4,755
Household supplies	6,217	5,124	10,173
Clothing	1,313	1,167	967
Personal care	2,864	3,513	4,183
Child / Dependent care	678	1,660	-
Alimony and child support	-	-	-
Gifts	3,267	1,186	10,078
Education	286	489	112
Recreation	3,500	2,740	2,433
Utilities (household share)	3,014	3,018	3,015
Personal vehicle operating exp	3,273	5,425	3,922
Household real estate taxes	918	50	1,781
Dwelling rent	186	-	-
Household repairs	1,694	1,579	386
Personal interest	1,068	2,706	772
Disability / Long term care ins	453	-	2,156
Life insurance payments	2,615	153	1,699
Personal property insurance	258	378	325
Miscellaneous	5,712	2,640	8,385
Total cash family living expense	62,254	53,319	75,626
Family living from the farm	251	-	-
Total family living	62,504	53,319	75,626
<b>Other Nonfarm Expenditures</b>			
Income taxes	28,347	13,211	58,153
Furnishing & appliance purchases	-	-	-
Nonfarm vehicle purchases	2,325	886	1,277
Nonfarm real estate purchases	295	-	-
Other nonfarm capital purchases	249	-14,270	8,732
Nonfarm savings & investments	6,817	6,994	-817
Total other nonfarm expenditures	38,034	6,821	67,345
Total cash family living investment & nonfarm capital purch	100,287	60,140	142,971

**Operator and Labor Information**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
<b>Operator Information</b>			
Average number of operators	1.2	1.0	1.4
Average age of operators	53.4	40.4	57.7
Average number of years farming	29.2	14.5	37.0
<b>Results Per Operator</b>			
Working capital	503,258	106,633	1,150,033
Total assets (market)	4,083,645	2,348,654	7,381,612
Total liabilities	1,426,199	872,618	2,551,318
Net worth (market)	2,657,446	1,476,036	4,830,295
Net worth excl deferred liabs	3,160,935	1,782,562	5,717,646
Gross farm income	1,086,000	322,335	2,713,119
Total farm expense	823,481	275,367	2,040,722
Net farm income from operations	262,519	46,967	672,397
Net nonfarm income	43,495	85,077	32,318
Family living & tax withdrawals	83,530	77,138	113,753
Total acres owned	189.1	106.0	292.8
Total crop acres	758.8	351.2	1,356.3
Crop acres owned	198.5	88.7	314.9
Crop acres cash rented	526.7	262.5	999.5
Crop acres share rented	33.6	-	42.0
Total pasture acres	9.6	-	9.9
<b>Labor Analysis</b>			
Number of farms	108	21	22
Total unpaid labor hours	2,062	814	3,086
Total hired labor hours	997	342	3,116
Total labor hours per farm	3,059	1,156	6,202
Unpaid hours per operator	1,726	814	2,263
Value of farm production / hour	323.36	265.04	403.85
Net farm income / unpaid hour	152.08	57.68	297.08
Average hourly hired labor wage	30.73	45.54	32.92

**Nonfarm Summary**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	108	21	22
<b>Nonfarm Income</b>			
Personal wages & salary	31,964	62,490	17,752
Net nonfarm business income	1,717	752	471
Personal rental income	5,045	12,060	6,560
Personal interest income	1,416	2,603	1,589
Personal cash dividends	175	26	-
Tax refunds	1,000	1,573	394
Other nonfarm income	10,636	5,574	17,304
Total nonfarm income	51,952	85,077	44,070
Gifts and inheritances	17,123	4,037	83
<b>Nonfarm Assets (market)</b>			
Checking & savings	14,769	12,510	9,693
Stocks & bonds	54,409	22,228	134,764
Other current assets	4,751	6,289	6,691
Furniture & appliances	10,428	7,040	12,598
Nonfarm vehicles	22,288	16,126	26,968
Cash value of life ins.	22,047	19,913	28,538
Retirement accounts	194,015	96,386	201,363
Other intermediate assets	101,566	46,337	375,313
Nonfarm real estate	200,291	509,652	93,958
Personal bus. investment	66,566	14,905	306,813
Other long term assets	55,212	37,933	65,502
Total nonfarm assets	746,342	789,319	1,262,202
<b>Nonfarm Liabilities</b>			
Accrued interest	170	112	86
Accounts payable	244	406	-
Current notes	144	273	445
Princ due on term debt	2,958	6,037	1,947
Total current liabilities	25,272	16,262	36,282
Intermediate liabilities	5,274	12,808	5,442
Long term liabilities	43,521	134,132	18,366
Total nonfarm liabilities	74,068	163,202	60,090
Nonfarm net worth	672,274	626,118	1,202,112
Nonfarm debt to asset ratio	10 %	21 %	5 %

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**Projected Profitability**  
**Southwest Minnesota Farm Business Management Association**

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	2020 Statewide Actual	2020 Improved Margin Mgmt.	2020 Statewide Crop Farms Actual	2021 Statewide Crop Farms Projected	2020 Statewide Lvst Farms Actual	2021 Statewide Lvst Farms Projected
<b>Liquidity</b>						
Current ratio	2.0	2.1	1.9	1.8	2.1	2.1
Working capital to gross	33%	35%	41%	40%	25%	26%
<b>Solvency<sup>1</sup></b>						
Debt to asset	35%	34%	33%	34%	37%	37%
Debt to equity	0.53	0.52	0.50	0.51	0.58	0.58
<b>Profitability</b>						
Rate of return on assets <sup>2</sup>	6%	9%	5%	3.1%	8%	1%
Operating profit margin	21%	29%	19%	12%	23%	2%
Net farm income <sup>3</sup>	\$174,273	\$257,000	\$161,076	\$99,000	\$243,117	\$20,000
<b>Repayment capacity</b>						
Term debt coverage	2.7	3.7	2.8	2.0	2.8	0.9
Replacement coverage	2.0	2.7	1.9	1.4	2.3	0.8
<b>Efficiency</b>						
Asset turnover rate	29%	31%	28%	27%	33%	28%
Operating expense ratio	72%	65%	69%	76%	76%	90%
<b>Net worth growth</b>						
Net worth change	12%	16%	11%	8%	15%	3%

	2020 Statewide All Farms Actual	2020 Improved Margin Mgmt.	2020 Statewide Crop Farms Actual	2021 Statewide Crop Farms Projected	2020 Statewide Lvst Farms Actual	2021 Statewide Lvst Farms Projected
<b>Projected Changes</b>						
Gross income	-	+5%	-	-5%	-	-6%
Operating expenses	-	-5%	-	+4%	-	+11%
Interest rates	-	0%	-	0%	-	-0%
Current assets	-	+5%	-	-3%	-	-0%
Noncurrent assets	-	0%	-	0%	-	0%

<sup>1</sup> Assets at estimated market value excluding deferred liabilities.

<sup>2</sup> Assets at estimated market value, returns excluding change in market valuation.

<sup>3</sup> Differs from previous tables because Owner Wages and Benefits are treated as expenses. In previous tables, owner wages and benefits are moved to Value of Operator Labor and Management to improve comparative analysis.



## Crop Reports

The Crop Enterprise Analysis tables show the average physical production, gross return, direct costs, overhead costs, and net returns per acre. There are potentially three tables for each crop depending on the farmer's tenure on the land: owned land, cash rented land, and share rented land. Farms are classified into low 20% or high 20% based on net return per acre. The classification is done separately for each table.

*Gross Return per Acre* includes the value of the crop produced plus any other income directly associated with production of the crop, including hedging gains or losses, crop insurance proceeds and any disaster payments that might have been received. It does not include government payments that are decoupled from production such as ARC and PLC payments (see Net Return with Government Payments). Government payments included as other income in 2020 crop enterprise analysis reports include CFAP 2 payments for eligible crops and EQIP or CSP payments received to offset annual production expenses.

The *Value per Unit* is assigned by the producer. For cash crops, the value is based on the actual sales price for production sold or contracted before year-end and the inventory value for crops still in inventory at year-end. The local harvest-time price is used for forages and other feed crops.

*Net Return per Acre* is the amount contributed toward operator labor, management, and equity capital. Any wages and benefits paid to the operator are removed from labor costs (and added to *Labor and Management Charge*) so that all farms are on equal footing. Land costs include land rent on the rented land pages, but only actual interest paid and real estate taxes on owned land. For this reason, net returns from owned and rented land should not be compared.

*Net Return with Government Payments* is the net return per acre after decoupled government payments such as ARC and PLC payments have been added. In 2020 this also includes CFAP 1 payments. These payments are generally allocated evenly per acre across all crops except vegetables and pasture.

*Net Return Over Labor and Management* is the return, including government payments, remaining after deducting an opportunity cost for unpaid operator labor and management. This is the per acre return to equity capital.

*Cost of Production* shows the average cost per unit produced in each cost category. *Total Direct and Overhead Expense per Unit* is the breakeven price needed to cover cash costs and depreciation. *Less Government and Other Income* is the breakeven price if government payments and any miscellaneous income are used to offset some expenses. *With Labor and Management* is the breakeven price to provide a labor and management return for the operator(s).

*Machinery Cost per Acre* includes fuel and oil, repairs, custom hire, machinery lease payments, machinery depreciation, and interest on intermediate debt.

Note: The following government payments received by crop producers were not included in the enterprise analysis.

- WHIP+ disaster program – these payments relate to crop losses in 2018 and 2019, not the current production year. Therefore, have been excluded for the 2020 crop enterprise analysis.
- MFP 2.0 3<sup>rd</sup> tranche payment – this payment, received in February 2020, was accrued (included) in the 2019 enterprise analysis of impacted crops.
- CFAP 3 (now termed Pandemic Assistance for Producers or PAP) – this payment, yet to be received at the time of this writing, will be included in the 2021 crop enterprise analysis of eligible crops.
- Other government program payments not directly related to crop production including: amounts of PPP loans forgiven, EIDL Emergency Advance Program, MN Small Business Relief Grants, and MN CARES Act funding for agriculture.



**Crop Enterprise Analysis**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Corn on Owned Land**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	65	13	13
Acres	165.25	143.79	166.01
Yield per acre (bu.)	202.70	173.84	217.70
Operators share of yield %	100.00	100.00	100.00
Value per bu.	4.21	4.05	4.46
Total product return per acre	853.58	704.12	971.01
Hedging gains/losses per acre	-4.31	-	-
Crop insurance per acre	5.70	26.69	5.28
Other crop income per acre	49.40	37.38	61.82
Gross return per acre	904.38	768.19	1,038.10
<b>Direct Expenses</b>			
Seed and plants	109.91	121.81	110.42
Fertilizer	106.82	108.96	115.22
Crop chemicals	33.92	32.14	36.28
Crop insurance	15.63	18.63	12.90
Drying expense	6.59	1.97	9.17
Storage	0.56	3.20	-
Fuel & oil	20.90	29.02	19.23
Repairs	58.26	85.44	43.58
Custom hire	8.78	9.20	2.18
Hired labor	2.63	1.51	5.52
Machinery leases	1.71	0.55	0.02
Hauling and trucking	0.53	0.07	-
Marketing	2.12	0.49	2.38
Operating interest	12.23	23.09	5.09
Miscellaneous	3.11	1.48	4.11
Total direct expenses per acre	383.71	437.54	366.10
Return over direct exp per acre	520.66	330.64	672.00
<b>Overhead Expenses</b>			
Hired labor	13.58	12.78	7.67
Machinery leases	3.63	3.44	-
RE & pers. property taxes	29.21	28.60	29.41
Farm insurance	13.48	14.68	11.75
Utilities	6.88	3.30	5.95
Dues & professional fees	5.43	6.42	6.58
Interest	60.97	112.92	23.86
Mach & bldg depreciation	71.30	66.10	69.92
Miscellaneous	6.30	2.60	3.99
Total overhead expenses per acre	210.77	250.84	159.14
Total dir & ovhd expenses per acre	594.49	688.38	525.24
Net return per acre	309.89	79.80	512.86
Government payments	57.25	58.10	62.92
Net return with govt pmts	367.14	137.90	575.78
Labor & management charge	65.63	50.31	72.09
Net return over lbr & mgt	301.52	87.59	503.69
<b>Cost of Production</b>			
Total direct expense per bu.	1.89	2.52	1.68
Total dir & ovhd exp per bu.	2.93	3.96	2.41
Less govt & other income	2.40	3.26	1.82
With labor & management	2.72	3.55	2.15
Net value per unit	4.19	4.05	4.46
Machinery cost per acre	151.50	181.66	123.40
Est. labor hours per acre	2.47	1.71	2.35

**Crop Enterprise Analysis**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Corn on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	88	17	18
Acres	377.55	438.26	378.94
Yield per acre (bu.)	201.03	188.11	219.25
Operators share of yield %	100.00	100.00	100.00
Value per bu.	4.25	4.09	4.37
Other product return per acre	0.11	-	0.55
Total product return per acre	854.95	768.50	959.35
Hedging gains/losses per acre	-12.40	-2.71	4.50
Crop insurance per acre	7.19	20.29	3.95
Other crop income per acre	49.74	53.36	49.11
Gross return per acre	899.47	839.43	1,016.91
<b>Direct Expenses</b>			
Seed and plants	103.61	110.27	104.13
Fertilizer	104.28	108.56	97.28
Crop chemicals	31.74	36.37	27.81
Cover crop expense	0.48	1.71	-
Crop insurance	17.93	24.55	19.67
Drying expense	7.40	6.02	7.00
Storage	0.87	3.62	0.00
Fuel & oil	20.67	31.32	15.36
Repairs	43.62	45.71	29.19
Custom hire	8.89	13.72	5.49
Hired labor	3.28	4.55	2.48
Land rent	202.78	217.97	209.28
Machinery leases	2.84	1.14	0.85
Hauling and trucking	0.59	1.12	0.20
Marketing	2.27	0.48	1.17
Operating interest	12.98	23.77	5.27
Miscellaneous	3.20	5.58	2.25
Total direct expenses per acre	567.43	636.47	527.42
Return over direct exp per acre	332.04	202.96	489.49
<b>Overhead Expenses</b>			
Hired labor	11.58	16.87	5.01
Machinery leases	12.12	8.78	17.32
Building leases	0.84	2.40	0.15
Farm insurance	11.00	18.32	8.15
Utilities	5.24	7.31	4.04
Dues & professional fees	5.98	8.28	4.55
Interest	4.80	6.84	4.80
Mach & bldg depreciation	58.05	74.23	41.09
Miscellaneous	6.64	4.52	2.37
Total overhead expenses per acre	116.24	147.57	87.47
Total dir & ovhd expenses per acre	683.67	784.04	614.90
Net return per acre	215.80	55.39	402.02
Government payments	50.63	57.41	45.31
Net return with govt pmts	266.43	112.79	447.32
Labor & management charge	58.84	53.96	52.97
Net return over lbr & mgt	207.58	58.83	394.35
<b>Cost of Production</b>			
Total direct expense per bu.	2.82	3.38	2.41
Total dir & ovhd exp per bu.	3.40	4.17	2.80
Less govt & other income	2.93	3.49	2.33
With labor & management	3.22	3.77	2.57
Net value per unit	4.19	4.07	4.39
Machinery cost per acre	141.88	168.77	108.31
Est. labor hours per acre	2.04	2.10	2.01

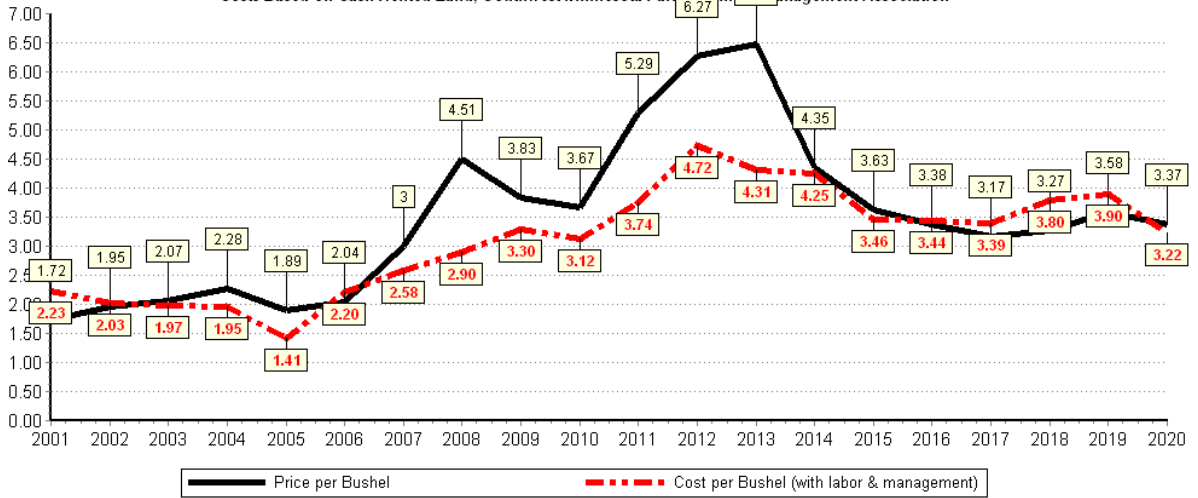
**Crop Enterprise Analysis**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Corn on Share Rent**

	<u>Avg. Of All Farms</u>
Number of farms	11
Acres	155.69
Yield per acre (bu.)	200.18
Operators share of yield %	53.55
Value per bu.	4.17
Total product return per acre	447.42
Other crop income per acre	39.56
Gross return per acre	486.99
<b>Direct Expenses</b>	
Seed and plants	62.33
Fertilizer	59.48
Crop chemicals	26.72
Crop insurance	12.64
Drying expense	5.17
Storage	0.22
Fuel & oil	17.01
Repairs	40.16
Custom hire	8.61
Hauling and trucking	0.51
Marketing	1.33
Operating interest	7.07
Miscellaneous	1.67
Total direct expenses per acre	242.92
Return over direct exp per acre	244.07
<b>Overhead Expenses</b>	
Hired labor	3.59
Machinery leases	2.18
Farm insurance	5.46
Utilities	3.74
Dues & professional fees	3.38
Interest	4.12
Mach & bldg depreciation	53.97
Miscellaneous	4.68
Total overhead expenses per acre	81.12
Total dir & ovhd expenses per acre	324.04
Net return per acre	162.95
Government payments	33.88
Net return with govt pmts	196.83
Labor & management charge	60.73
Net return over lbr & mgt	136.10
<b>Cost of Production</b>	
Total direct expense per bu.	2.27
Total dir & ovhd exp per bu.	3.02
Less govt & other income	2.34
With labor & management	2.90
Net value per unit	4.17
Machinery cost per acre	120.44
Est. labor hours per acre	2.40

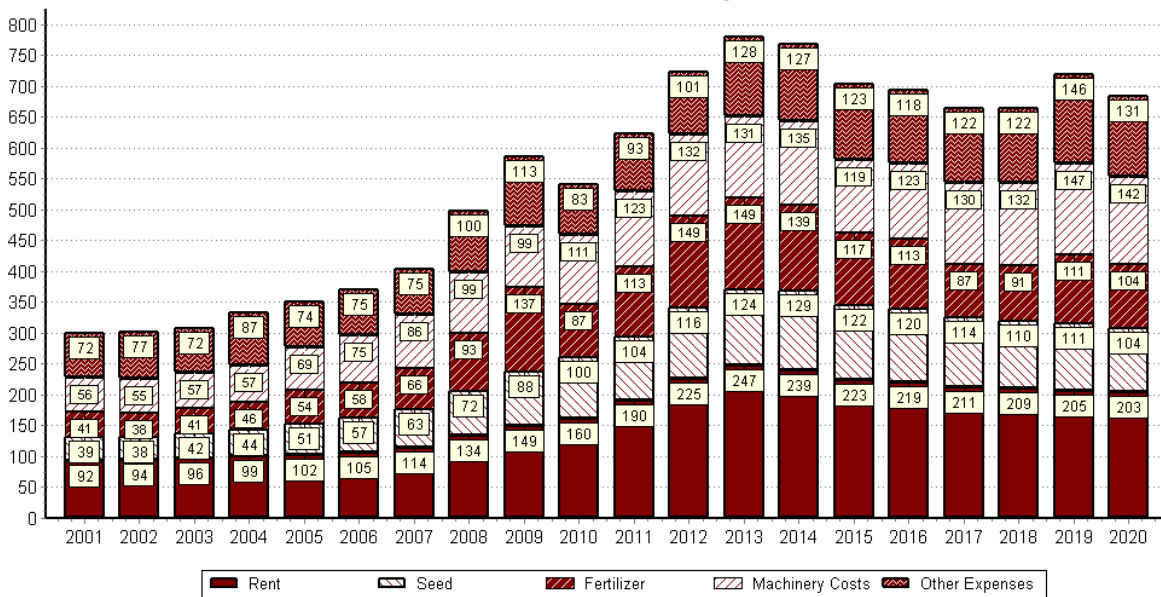
**Figure 9: Corn Price and Cost of Production**

Costs Based on Cash Rented Land, Southwest Minnesota Farm Business Management Association



**Figure 10: Corn Cost Per Acre**

Cash Rented, Southwest Minnesota Farm Business Management Association



Machinery costs include fuel, repairs, custom hire, lease expense, interest, and depreciation.

**Crop Enterprise Analysis**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Soybeans on Owned Land**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	66	13	14
Acres	159.11	104.11	159.26
Yield per acre (bu.)	58.74	51.01	62.30
Operators share of yield %	100.00	100.00	100.00
Value per bu.	11.01	9.18	12.25
Total product return per acre	646.97	468.47	762.90
Hedging gains/losses per acre	-5.30	-	-
Crop insurance per acre	4.32	14.83	2.08
Other crop income per acre	22.82	25.32	30.53
Gross return per acre	668.80	508.62	795.51
<b>Direct Expenses</b>			
Seed and plants	52.46	50.85	48.48
Fertilizer	31.87	46.09	28.44
Crop chemicals	46.33	50.68	47.48
Cover crop expense	0.21	1.38	-
Crop insurance	14.88	20.10	12.63
Fuel & oil	15.85	14.99	12.41
Repairs	39.39	57.76	29.59
Custom hire	8.23	14.64	6.17
Hired labor	3.69	4.73	4.52
Machinery leases	2.10	0.68	5.16
Marketing	3.01	1.56	0.89
Operating interest	9.71	17.32	4.54
Miscellaneous	4.11	4.07	2.06
Total direct expenses per acre	231.84	284.85	202.37
Return over direct exp per acre	436.97	223.77	593.14
<b>Overhead Expenses</b>			
Hired labor	9.51	8.03	7.24
Machinery leases	3.95	1.14	4.74
RE & pers. property taxes	32.28	29.04	33.59
Farm insurance	10.40	11.39	9.29
Utilities	6.02	4.66	5.47
Dues & professional fees	3.96	3.91	3.77
Interest	64.03	141.03	28.43
Mach & bldg depreciation	55.60	43.00	56.83
Miscellaneous	4.77	7.14	1.92
Total overhead expenses per acre	190.51	249.33	151.28
Total dir & ovhd expenses per acre	422.35	534.18	353.66
Net return per acre	246.46	-25.56	441.86
Government payments	57.39	49.38	61.53
Net return with govt pmts	303.84	23.82	503.39
Labor & management charge	52.68	42.58	58.34
Net return over lbr & mgt	251.17	-18.76	445.04
<b>Cost of Production</b>			
Total direct expense per bu.	3.95	5.58	3.25
Total dir & ovhd exp per bu.	7.19	10.47	5.68
Less govt & other income	5.84	8.72	4.17
With labor & management	6.74	9.55	5.10
Net value per unit	10.92	9.18	12.25
Machinery cost per acre	115.36	128.67	104.26
Est. labor hours per acre	1.89	1.89	1.98

**Crop Enterprise Analysis**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Soybeans on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	85	17	17
Acres	352.89	333.89	207.24
Yield per acre (bu.)	57.12	54.69	62.82
Operators share of yield %	100.00	100.00	100.00
Value per bu.	11.01	9.59	11.65
Total product return per acre	629.21	524.51	732.03
Hedging gains/losses per acre	-31.08	-2.48	6.33
Crop insurance per acre	5.97	13.84	3.11
Other crop income per acre	22.00	19.22	23.75
Gross return per acre	626.10	555.10	765.23
<b>Direct Expenses</b>			
Seed and plants	48.62	56.20	51.03
Fertilizer	30.36	46.17	33.06
Crop chemicals	47.41	56.18	48.95
Crop insurance	15.24	18.93	11.29
Storage	0.29	0.59	0.09
Fuel & oil	15.67	22.96	10.91
Repairs	33.17	37.60	25.11
Custom hire	7.06	14.01	9.65
Hired labor	2.96	3.06	10.60
Land rent	210.25	212.43	179.54
Machinery leases	2.88	0.37	1.82
Hauling and trucking	0.51	-	-
Marketing	2.40	1.13	2.64
Operating interest	9.01	19.71	3.30
Miscellaneous	2.75	5.11	1.43
Total direct expenses per acre	428.58	494.46	389.41
Return over direct exp per acre	197.52	60.64	375.81
<b>Overhead Expenses</b>			
Hired labor	11.44	18.60	4.56
Machinery leases	12.47	4.03	1.37
Building leases	0.82	3.39	-
Farm insurance	8.01	11.90	8.74
Utilities	3.81	4.46	3.74
Dues & professional fees	3.64	5.64	5.23
Interest	3.34	4.18	2.36
Mach & bldg depreciation	41.96	57.38	47.63
Miscellaneous	4.99	5.27	2.45
Total overhead expenses per acre	90.47	114.85	76.09
Total dir & ovhd expenses per acre	519.05	609.31	465.50
Net return per acre	107.05	-54.21	299.73
Government payments	47.08	48.80	56.37
Net return with govt pmts	154.13	-5.41	356.10
Labor & management charge	46.39	42.42	60.01
Net return over lbr & mgt	107.74	-47.83	296.09
<b>Cost of Production</b>			
Total direct expense per bu.	7.50	9.04	6.20
Total dir & ovhd exp per bu.	9.09	11.14	7.41
Less govt & other income	8.32	9.69	5.98
With labor & management	9.13	10.47	6.94
Net value per unit	10.47	9.55	11.75
Machinery cost per acre	109.89	132.73	92.37
Est. labor hours per acre	1.64	1.77	1.88

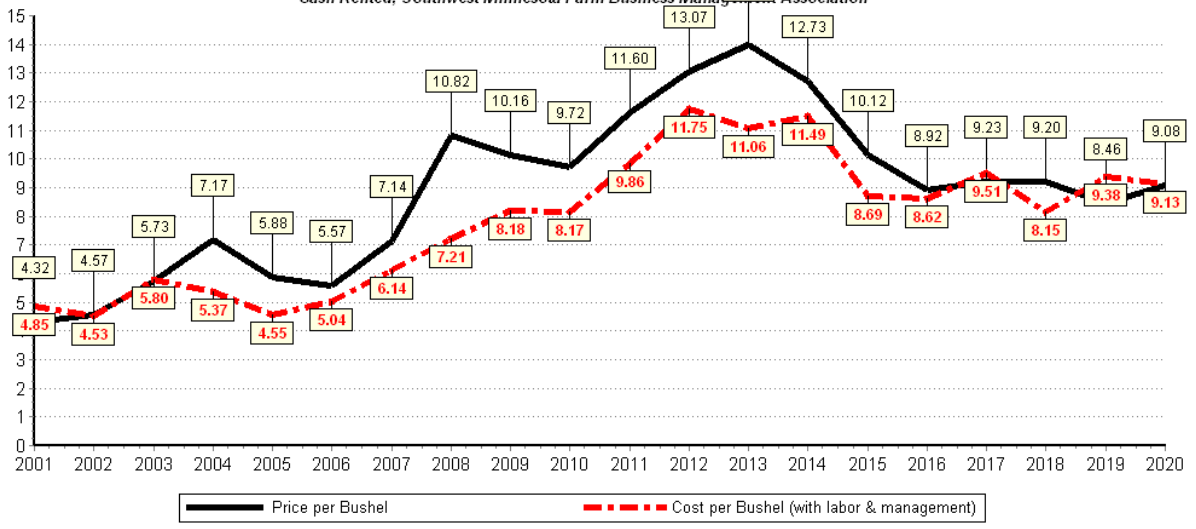
**Crop Enterprise Analysis**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Soybeans on Share Rent**

	<u>Avg. Of All Farms</u>
Number of farms	12
Acres	165.21
Yield per acre (bu.)	58.83
Operators share of yield %	51.01
Value per bu.	9.79
Total product return per acre	293.69
Crop insurance per acre	0.67
Other crop income per acre	21.09
Gross return per acre	315.46
<b>Direct Expenses</b>	
Seed and plants	24.77
Fertilizer	15.02
Crop chemicals	40.88
Crop insurance	7.81
Storage	0.19
Fuel & oil	13.70
Repairs	36.37
Custom hire	4.51
Hired labor	1.09
Machinery leases	3.11
Marketing	0.59
Operating interest	5.58
Miscellaneous	1.75
Total direct expenses per acre	155.37
Return over direct exp per acre	160.09
<b>Overhead Expenses</b>	
Hired labor	3.57
Machinery leases	6.51
Farm insurance	4.87
Utilities	2.96
Dues & professional fees	4.14
Interest	3.56
Mach & bldg depreciation	43.49
Miscellaneous	4.03
Total overhead expenses per acre	73.12
Total dir & ovhd expenses per acre	228.49
Net return per acre	86.97
Government payments	30.57
Net return with govt pmts	117.54
Labor & management charge	46.96
Net return over lbr & mgt	70.58
<b>Cost of Production</b>	
Total direct expense per bu.	5.18
Total dir & ovhd exp per bu.	7.61
Less govt & other income	5.87
With labor & management	7.44
Net value per unit	9.79
Machinery cost per acre	106.99
Est. labor hours per acre	1.70

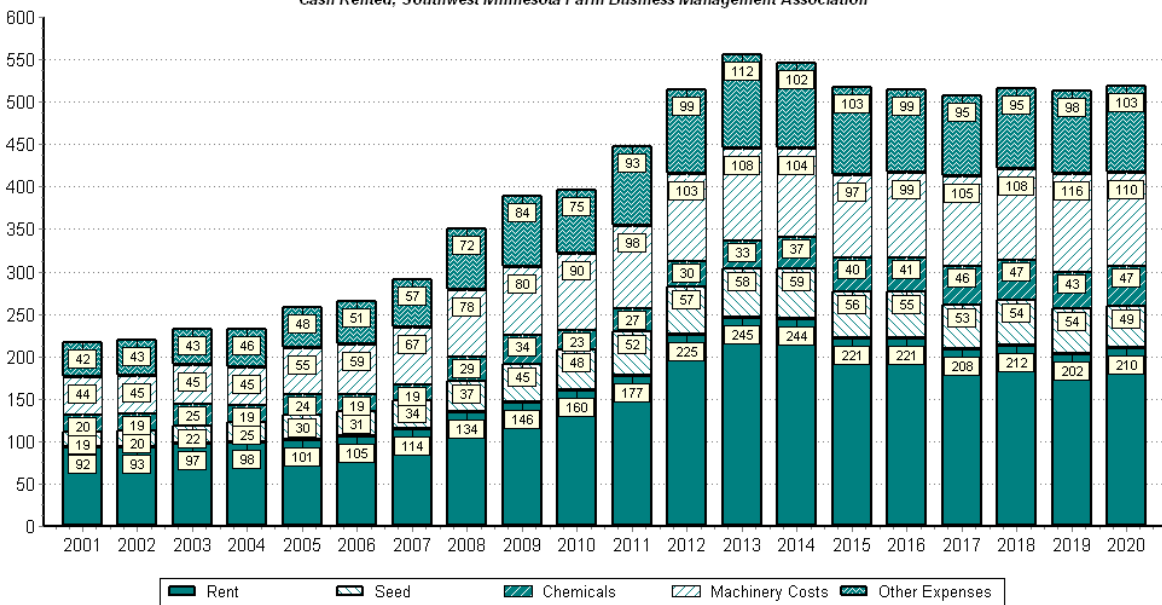
**Figure 11: Soybean Price and Cost of Production**

Cash Rented, Southwest Minnesota Farm Business Management Association



**Figure 12: Soybean Cost Per Acre**

Cash Rented, Southwest Minnesota Farm Business Management Association



Machinery costs include fuel, repairs, custom hire, lease payments, interest and depreciation.



**Crop Enterprise Analysis**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Crop Tenure Type)**

**Corn Silage**

	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	11	9
Acres	112.34	76.01
Yield per acre (ton)	20.86	20.61
Operators share of yield %	100.00	100.00
Value per ton	35.50	33.68
Total product return per acre	740.59	694.22
Hedging gains/losses per acre	-3.41	-
Crop insurance per acre	-	12.81
Other crop income per acre	49.31	64.81
Gross return per acre	786.49	771.84
<b>Direct Expenses</b>		
Seed and plants	97.57	101.06
Fertilizer	77.73	98.50
Crop chemicals	29.25	37.10
Cover crop expense	5.54	8.13
Crop insurance	12.86	11.96
Fuel & oil	14.97	10.73
Repairs	41.13	29.71
Custom hire	10.01	13.92
Hired labor	4.88	0.36
Land rent	-	217.75
Machinery leases	1.50	0.26
Marketing	-	1.11
Operating interest	9.83	7.40
Miscellaneous	2.89	2.96
Total direct expenses per acre	308.17	540.94
Return over direct exp per acre	478.32	230.90
<b>Overhead Expenses</b>		
Hired labor	3.41	3.90
Machinery leases	6.37	14.84
RE & pers. property taxes	35.55	-
Farm insurance	5.79	4.54
Utilities	3.85	7.33
Dues & professional fees	2.74	2.09
Interest	36.13	5.34
Mach & bldg depreciation	75.29	84.79
Miscellaneous	4.21	4.50
Total overhead expenses per acre	173.35	127.32
Total dir & ovhd expenses per acre	481.52	668.27
Net return per acre	304.97	103.57
Government payments	59.06	60.91
Net return with govt pmts	364.03	164.48
Labor & management charge	59.75	72.29
Net return over lbr & mgt	304.28	92.20
<b>Cost of Production</b>		
Total direct expense per ton	14.77	26.24
Total dir & ovhd exp per ton	23.08	32.42
Less govt & other income	18.05	25.70
With labor & management	20.91	29.20
Net value per unit	35.33	33.68
Machinery cost per acre	144.00	141.37
Est. labor hours per acre	1.60	2.12

**Crop Enterprise Analysis**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Crop Tenure Type)**

**Hay, Alfalfa**

	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	10	8
Acres	60.63	79.56
Yield per acre (ton)	4.47	4.84
Operators share of yield %	100.00	100.00
Value per ton	135.42	118.82
Total product return per acre	605.70	575.31
Other crop income per acre	13.63	13.88
Gross return per acre	619.33	589.19
<b>Direct Expenses</b>		
Fertilizer	59.25	58.79
Crop chemicals	-	4.80
Crop insurance	5.90	4.32
Fuel & oil	16.31	11.66
Repairs	36.14	31.24
Custom hire	1.90	6.79
Hired labor	-	6.96
Land rent	-	212.33
Machinery leases	1.76	-
Marketing	-	0.50
Operating interest	9.82	4.18
Miscellaneous	2.83	2.42
Total direct expenses per acre	133.92	344.01
Return over direct exp per acre	485.41	245.18
<b>Overhead Expenses</b>		
Hired labor	4.61	0.31
Machinery leases	7.62	4.78
RE & pers. property taxes	36.54	-
Farm insurance	7.92	7.38
Utilities	5.60	4.39
Dues & professional fees	4.06	1.21
Interest	40.47	3.18
Mach & bldg depreciation	88.52	77.36
Miscellaneous	5.49	2.97
Total overhead expenses per acre	200.82	101.57
Total dir & ovhd expenses per acre	334.74	445.58
Net return per acre	284.59	143.60
Government payments	56.99	50.37
Net return with govt pmts	341.58	193.97
Labor & management charge	59.41	67.43
Net return over lbr & mgt	282.17	126.54
<b>Cost of Production</b>		
Total direct expense per ton	29.94	71.05
Total dir & ovhd exp per ton	74.84	92.03
Less govt & other income	59.05	78.76
With labor & management	72.33	92.68
Net value per unit	135.42	118.82
Machinery cost per acre	138.75	123.19
Est. labor hours per acre	1.56	2.01

**Crop Enterprise Analysis**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Crop Tenure Type)**

**CRP**

	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	12	5
Acres	26.01	32.25
Gross return per acre	156.73	193.68
<b>Direct Expenses</b>		
Fuel & oil	2.20	1.38
Repairs	3.77	4.78
Land rent	-	110.04
Operating interest	1.06	0.62
Miscellaneous	0.55	-
Total direct expenses per acre	7.58	116.82
Return over direct exp per acre	149.15	76.86
<b>Overhead Expenses</b>		
Hired labor	1.07	0.95
Machinery leases	0.51	1.01
RE & pers. property taxes	21.01	-
Farm insurance	0.79	1.34
Utilities	0.99	0.65
Dues & professional fees	0.99	0.84
Interest	33.14	0.45
Mach & bldg depreciation	7.60	5.78
Miscellaneous	0.55	0.07
Total overhead expenses per acre	66.65	11.09
Total dir & ovhd expenses per acre	74.23	127.91
Net return per acre	82.50	65.78
Government payments	-	-
Net return with govt pmts	82.50	65.78
Labor & management charge	7.14	6.15
Net return over lbr & mgt	75.36	59.62
Net value per unit	1.00	1.00
Machinery cost per acre	12.13	12.77
Est. labor hours per acre	0.26	0.33

Crop Enterprise Analysis  
(Farms Sorted By Years)

Corn on Cash Rent

	Avg. Of <u>All Farms</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
Number of farms	339	88	85	78	88
Acres	365.79	379.21	375.67	326.62	377.55
Yield per acre (bu.)	187.15	200.58	175.62	165.90	201.03
Operators share of yield %	100.00	100.00	100.00	100.00	100.00
Value per bu.	3.62	3.08	3.39	3.80	4.25
Other product return per acre	0.10	0.07	0.10	0.09	0.11
Total product return per acre	678.25	617.97	595.87	630.03	854.95
Hedging gains/losses per acre	-2.72	-0.59	2.93	0.06	-12.40
Crop insurance per acre	27.24	16.34	37.89	54.33	7.19
Other crop income per acre	32.74	9.10	8.28	72.18	49.74
Gross return per acre	735.51	642.82	644.97	756.60	899.47
<b>Direct Expenses</b>					
Seed	109.51	113.94	110.10	110.64	103.61
Fertilizer	97.51	87.12	90.85	110.66	104.28
Crop chemicals	31.01	29.13	29.86	33.97	31.74
Crop insurance	16.82	16.26	15.10	18.25	17.93
Drying expense	14.37	14.92	13.40	23.97	7.40
Storage	0.89	1.22	0.81	0.60	0.87
Fuel & oil	22.72	21.13	25.73	23.69	20.67
Repairs	39.48	37.11	37.94	39.10	43.62
Custom hire	9.23	9.73	7.07	11.75	8.89
Hired labor	3.80	0.52	5.45	6.68	3.28
Land rent	206.90	211.17	208.52	204.67	202.78
Machinery leases	4.77	9.01	1.88	5.37	2.84
Hauling and trucking	0.54	0.35	0.50	0.76	0.59
Marketing	1.89	2.38	1.37	1.39	2.27
Operating interest	13.29	11.69	12.72	16.49	12.98
Miscellaneous	3.24	2.71	3.59	2.91	3.68
Total direct expenses per acre	575.96	568.39	564.88	610.89	567.43
Return over direct exp per acre	159.55	74.43	80.09	145.71	332.04
<b>Overhead Expenses</b>					
Hired labor	8.81	12.04	6.73	3.58	11.58
Machinery leases	8.43	1.59	12.59	7.36	12.12
Building leases	1.34	1.03	1.85	1.76	0.84
Farm insurance	10.17	9.97	9.26	10.51	11.00
Utilities	5.23	4.89	5.06	5.87	5.24
Dues & professional fees	5.23	3.19	4.48	7.84	5.98
Interest	4.51	3.28	4.46	5.80	4.80
Mach & bldg depreciation	56.23	56.14	50.23	61.51	58.05
Miscellaneous	5.09	3.90	4.67	5.17	6.64
Total overhead expenses per acre	105.05	96.04	99.34	109.39	116.24
Total dir & ovhd expenses per acre	681.01	664.43	664.22	720.28	683.67
Net return per acre	54.51	-21.61	-19.25	36.31	215.80
Government payments	17.89	12.54	0.01	4.63	50.63
Net return with govt pmts	72.40	-9.07	-19.24	40.94	266.43
Labor & management charge	55.17	52.26	51.52	58.76	58.84
Net return over lbr & mgt	17.23	-61.33	-70.77	-17.82	207.58
<b>Cost of Production</b>					
Total direct expense per bu.	3.08	2.83	3.22	3.68	2.82
Total dir & ovhd exp per bu.	3.64	3.31	3.78	4.34	3.40
Less govt & other income	3.24	3.13	3.50	3.55	2.93
With labor & management	3.53	3.39	3.80	3.90	3.22
Net value per unit	3.61	3.08	3.41	3.80	4.19
Machinery cost per acre	137.36	130.17	132.41	147.08	141.88
Est. labor hours per acre	2.16	2.24	2.10	2.29	2.04

*Crop Enterprise Analysis  
(Farms Sorted By Years)*

*Soybeans on Cash Rent*

	<u>Avg. Of All Farms</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
Number of farms	341	90	85	81	85
Acres	351.25	337.77	367.32	347.65	352.89
Yield per acre (bu.)	53.32	54.28	53.20	48.36	57.12
Operators share of yield %	100.00	100.00	100.00	100.00	100.00
Value per bu.	9.38	8.96	8.54	8.83	11.01
Total product return per acre	499.92	486.28	454.57	427.19	629.21
Hedging gains/losses per acre	-7.60	-1.22	1.83	0.04	-31.08
Crop insurance per acre	15.34	6.68	27.01	21.72	5.97
Other crop income per acre	53.10	16.98	94.28	79.57	22.00
Gross return per acre	560.75	508.73	577.69	528.52	626.10
<b>Direct Expenses</b>					
Seed	52.43	52.76	54.27	54.10	48.62
Fertilizer	27.74	29.34	27.13	23.90	30.36
Crop chemicals	45.93	46.32	46.53	43.28	47.41
Crop insurance	16.42	16.32	17.01	17.14	15.24
Fuel & oil	18.20	16.70	20.54	19.92	15.67
Repairs	31.71	28.72	31.66	33.42	33.17
Custom hire	7.29	7.37	6.67	8.15	7.06
Hired labor	4.30	0.65	5.66	8.18	2.96
Land rent	208.23	208.02	212.41	201.69	210.25
Machinery leases	6.06	9.45	1.41	10.94	2.88
Hauling and trucking	0.36	0.19	0.53	0.20	0.51
Marketing	1.90	2.37	1.11	1.70	2.40
Operating interest	10.49	9.22	10.09	13.87	9.01
Miscellaneous	3.53	3.36	3.95	3.79	3.04
Total direct expenses per acre	434.61	430.79	438.98	440.30	428.58
Return over direct exp per acre	126.14	77.94	138.71	88.22	197.52
<b>Overhead Expenses</b>					
Hired labor	7.29	9.65	4.96	2.92	11.44
Machinery leases	7.70	1.13	12.12	4.81	12.47
Building leases	1.13	0.92	1.55	1.24	0.82
Farm insurance	7.40	7.55	7.04	6.97	8.01
Utilities	3.84	3.98	3.50	4.11	3.81
Dues & professional fees	3.39	2.44	3.16	4.40	3.64
Interest	3.11	2.51	3.29	3.30	3.34
Mach & bldg depreciation	41.70	45.48	37.82	41.63	41.96
Miscellaneous	3.68	2.85	3.46	3.42	4.99
Total overhead expenses per acre	79.23	76.51	76.89	72.80	90.47
Total dir & ovhd expenses per acre	513.84	507.30	515.88	513.10	519.05
Net return per acre	46.91	1.43	61.81	15.42	107.05
Government payments	15.20	10.42	0.01	3.24	47.08
Net return with govt pmts	62.11	11.85	61.82	18.66	154.13
Labor & management charge	43.42	41.56	40.76	45.22	46.39
Net return over lbr & mgt	18.69	-29.72	21.07	-26.56	107.74
<b>Cost of Production</b>					
Total direct expense per bu.	8.15	7.94	8.25	9.10	7.50
Total dir & ovhd exp per bu.	9.64	9.35	9.70	10.61	9.09
Less govt & other income	8.21	8.74	7.38	8.45	8.32
With labor & management	9.03	9.51	8.15	9.38	9.13
Net value per unit	9.23	8.94	8.58	8.83	10.47
Machinery cost per acre	109.64	105.00	107.84	116.38	109.89
Est. labor hours per acre	1.72	1.75	1.66	1.84	1.64



# Livestock Reports

The Livestock Enterprise Analysis tables show the average physical production, gross margin over purchase costs, direct costs, overhead costs, and net returns per unit.

**The livestock enterprise summaries include data from both Southwest Minnesota Farm Management Association farms and Minnesota State Farm Business Management program farms. This provides a greater numbers farms reporting for each enterprise, providing more accurate benchmark information. Minnesota State FBM programs are distributed across the state and include over 2,240 participating farms. We want to thank the Minnesota State FBM program and participating producers for making this data available to be included in this report.**

The “Dairy” table, if included, contains the information for only the milking herd (which includes dry cows). “Dairy Replacement Heifers” are those heifers kept for replacement into the milking herd. The “Dairy and Replacement Heifers” table is for the whole herd and includes those farms in the “Dairy” and “Dairy Replacement Heifers” tables; it does not include “Dairy Steers.”

*Gross Margin* is the accrual gross value added by the enterprise. It includes income from sale of offspring and livestock products, cull income, non-cash transfers to other enterprises, and the value of production used in the home or for feed. It also includes the value of inventory change from beginning to the end of the year. The cost of livestock purchased, and the value of animals transferred in are deducted. Lastly, other income sources, like government payment income. Government program payments included in the 2020 analysis, for eligible livestock, include CFAP 1 and 2 payments; Emergency Animal Mortality Management program from NRCS EQIP and MN CARES Act funding for agriculture; DMC and MN DAIRI payments; and EQIP and/or CSP funds received for annual production expenses.

*Net Return* is the amount contributed by the enterprise toward operator labor, management, and equity capital. Any wages and benefits paid to the operator are removed from labor costs (and added to *Labor and Management Charge*) so that all farms are on equal footing.

*Net Return Over Labor and Management* is the return remaining after deducting an opportunity cost for unpaid labor and management. This is the return to equity capital.

*Cost of Production* shows the average cost per unit sold in each cost category. *Total direct and overhead expense per unit* is the breakeven price needed to cover cash costs and depreciation. For grow/finish enterprises, this includes the purchase cost or transfer in value of the animal. *With other revenue adjustments* is the breakeven price adjusted for cull sales, other offspring sales, the cost of replacement stock, and any other miscellaneous income. This assumes that some costs can be covered by these other income sources. *With labor and management* is the final breakeven price to provide a labor and management return for the operator(s).

*Other Information* contains both economic and technical efficiency measures for each enterprise.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms have a certain livestock enterprise, that information is not reported. If there are fewer than 25 farms, the high and low groups are not reported.

Note: The following government payments received by livestock producers were not included in the enterprise analysis.

- WHIP+ disaster program – these payments relate to crop losses, not livestock production.
- MFP 2.0 3<sup>rd</sup> tranche payment – this payment, received in February 2020, was accrued (included) in the 2019 enterprise analysis of impacted livestock.
- CFAP 3 (now termed Pandemic Assistance for Producers or PAP) – this payment, yet to be received at the time of this writing, will be included in the 2021 livestock enterprise analysis of eligible livestock.
- Other government program payments not directly related to livestock production including: amounts of PPP loans forgiven, EIDL Emergency Advance Program, MN Small Business Relief Grants, and general MN CARES Act funding for agriculture.



**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Hogs, Finish Feeder Pigs -- Average Per Head**

	<u>Avg. Of All Farms</u>		<u>High 20%</u>	
	21		5	
	Quantity	Value	Quantity	Value
Number of farms				
Finish Hogs sold (lb)	288.7	137.87	289.8	139.66
Transferred out (lb)	1.0	0.58	1.1	0.51
Cull sales (lb)	1.2	0.20	-	-
Insurance income		0.82		-
Government payments		20.90		35.98
Other income		2.40		2.59
Purchased (lb)	-41.9	-55.66	-40.6	-47.40
Transferred in (lb)	-4.5	-5.49	-13.4	-11.99
Inventory change (lb)	-4.6	3.60	-1.3	0.16
Gross margin		105.22		119.52
<b>Direct Expenses</b>				
Corn Distillers Grn (dry) (lb.)	2.3	0.20	19.4	1.70
Protein Vit Minerals (lb.)	135.3	24.89	115.0	19.85
Complete Ration (lb.)	127.4	11.20	121.6	12.54
Corn (bu.)	7.4	26.38	7.5	25.80
Other feed stuffs (lb)	8.0	0.70	5.7	0.38
Contract production exp.		7.58		-
Fuel & oil		0.55		1.12
Repairs		1.43		4.11
Custom hire		3.04		0.34
Hauling and trucking		1.19		3.84
Operating interest		0.70		0.40
Miscellaneous		2.15		2.15
Total direct expenses		80.00		72.22
Return over direct expense		25.22		47.30
<b>Overhead Expenses</b>				
Hired labor		2.14		4.82
Building leases		4.10		3.05
Farm insurance		0.84		2.01
Utilities		1.19		2.40
Interest		0.92		1.29
Mach & bldg depreciation		1.99		0.57
Miscellaneous		1.29		2.69
Total overhead expenses		12.46		16.83
Total dir & ovhd expenses		92.47		89.04
Net return		12.75		30.47
Labor & management charge		2.62		6.73
Net return over lbr & mgt		10.14		23.74
<b>Cost of Production/Cwt. Carcass Sold</b>				
Total direct expense per unit		64.08		61.12
Total dir & ovhd expense per unit		69.90		68.95
With other revenue adjustments		58.73		51.03
With labor and management		59.95		54.16
Est. labor hours per unit		0.21		0.42
<b>Other Information</b>				
No. purchased or trans in		9,301		4,529
Number sold or trans out		8,760		4,467
Percentage death loss		4.9		5.0
Percent substandard hogs		2		1
Avg. daily gain (lb.)		1.59		1.54
Lb. of feed / lb. of gain		2.85		2.90
Feed cost per cwt. of gain		26.37		25.55
Feed cost per head		63.37		60.26
Hired labor per head		2.28		5.97
Average purchase weight		42		47
Avg wgt / Finish Hogs sold		278		272
Avg purch price / head		55.72		55.45
Avg sales price / cwt.		47.75		48.18
Average carcass weight		210		204
Average price / cwt. carcass		64.07		64.48

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Hogs, Finish Feeder Pigs -- Average Per Cwt. Carcass Sold**

	<u>Avg. Of All Farms</u>		<u>High 20%</u>	
	21		5	
	Quantity	Value	Quantity	Value
Number of farms				
Finish Hogs sold (lb)	134.91	64.42	134.83	64.97
Transferred out (lb)	0.46	0.27	0.50	0.24
Cull sales (lb)	0.55	0.10	-	-
Insurance income		0.38		-
Government payments		9.77		16.74
Other income		1.12		1.21
Purchased (lb)	-19.57	-26.01	-18.87	-22.05
Transferred in (lb)	-2.12	-2.57	-6.24	-5.58
Inventory change (lb)	-2.14	1.68	-0.58	0.08
Gross margin		49.16		55.60
<b>Direct Expenses</b>				
Corn Distillers Grn (dry) (lb.)	1.07	0.09	9.01	0.79
Protein Vit Minerals (lb.)	63.21	11.63	53.49	9.23
Complete Ration (lb.)	59.52	5.23	56.55	5.83
Corn (bu.)	3.44	12.32	3.50	12.00
Other feed stuffs (lb)	3.75	0.33	2.66	0.18
Contract production exp.		3.54		-
Fuel & oil		0.26		0.52
Repairs		0.67		1.91
Custom hire		1.42		0.16
Hauling and trucking		0.55		1.79
Operating interest		0.33		0.18
Miscellaneous		1.00		1.00
Total direct expenses		37.38		33.60
Return over direct expense		11.78		22.00
<b>Overhead Expenses</b>				
Hired labor		1.00		2.24
Building leases		1.92		1.42
Farm insurance		0.39		0.94
Utilities		0.56		1.12
Interest		0.43		0.60
Mach & bldg depreciation		0.93		0.27
Miscellaneous		0.60		1.25
Total overhead expenses		5.82		7.83
Total dir & ovhd expenses		43.20		41.42
Net return		5.96		14.18
Labor & management charge		1.22		3.13
Net return over lbr & mgt		4.74		11.04
<b>Cost of Production/Cwt. Carcass Sold</b>				
Total direct expense per unit		64.08		61.12
Total dir & ovhd expense per unit		69.90		68.95
With other revenue adjustments		58.73		51.03
With labor and management		59.95		54.16
Est. labor hours per unit		0.10		0.19
<b>Other Information</b>				
No. purchased or trans in		9,301		4,529
Number sold or trans out		8,760		4,467
Percentage death loss		4.9		5.0
Percent substandard hogs		2		1
Avg. daily gain (lb.)		1.59		1.54
Lb. of feed / lb. of gain		2.85		2.90
Feed cost per cwt. of gain		26.37		25.55
Feed cost per head		63.37		60.26
Hired labor per head		2.28		5.97
Average purchase weight		42		47
Avg wgt / Finish Hogs sold		278		272
Avg purch price / head		55.72		55.45
Avg sales price / cwt.		47.75		48.18
Average carcass weight		210		204
Average price / cwt. carcass		64.07		64.48

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Hogs, Weaning to Finish -- Average Per Head**

	<b>Avg. Of All Farms</b>	
Number of farms	20	
	Quantity	Value
Wean-Fin Pig sold (lb)	273.2	130.88
Transferred out (lb)	0.0	0.00
Cull sales (lb)	1.4	0.16
Insurance income		0.23
Government payments		19.56
Other income		5.01
Purchased (lb)	-14.6	-40.04
Transferred in (lb)	-0.4	-1.22
Inventory change (lb)	7.6	4.31
Gross margin		118.89
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	121.8	23.93
Complete Ration (lb.)	47.9	5.59
Corn (bu.)	8.0	27.88
DDGS, dry (lb.)	80.7	5.93
Other feed stuffs (lb)	1.0	4.89
Veterinary		3.43
Contract production exp.		11.86
Repairs		1.45
Custom hire		2.00
Hired labor		1.46
Hauling and trucking		1.47
Operating interest		1.41
Miscellaneous		2.09
Total direct expenses		93.40
Return over direct expense		25.49
<b>Overhead Expenses</b>		
Hired labor		0.95
Building leases		2.82
Farm insurance		0.77
Mach & bldg depreciation		2.45
Miscellaneous		2.05
Total overhead expenses		9.04
Total dir & ovhd expenses		102.43
Net return		16.45
Labor & management charge		2.77
Net return over lbr & mgt		13.68
<b>Cost of Production/Cwt. Carcass Sold</b>		
Total direct expense per unit		64.69
Total dir & ovhd expense per unit		69.18
With other revenue adjustments		56.86
With labor and management		58.24
Est. labor hours per unit		0.21
<b>Other Information</b>		
No. purchased or trans in		25,402
Number sold or trans out		23,634
Percentage death loss		4.4
Percent substandard hogs		2
Avg. daily gain (lb.)		1.55
Lb. of feed / lb. of gain		2.74
Feed cost per cwt. of gain		25.53
Feed cost per head		68.22
Hired labor per head		2.40
Average purchase weight		14
Avg wgt / Wean-Fin Pig sold		278
Avg purch price / head		39.13
Avg sales price / cwt.		47.90
Average carcass weight		209
Average price / cwt. carcass		64.68

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Hogs, Weaning to Finish -- Average Per Cwt. Carcass Sold**

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	20	
	Quantity	Value
Wean-Fin Pig sold (lb)	135.77	65.03
Transferred out (lb)	0.00	0.00
Cull sales (lb)	0.71	0.08
Insurance income		0.11
Government payments		9.72
Other income		2.49
Purchased (lb)	-7.24	-19.90
Transferred in (lb)	-0.21	-0.61
Inventory change (lb)	3.76	2.14
Gross margin		59.08
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	60.53	11.89
Complete Ration (lb.)	23.79	2.78
Corn (bu.)	4.00	13.85
DDGS, dry (lb.)	40.10	2.95
Other feed stuffs (lb)	0.48	2.43
Veterinary		1.71
Contract production exp.		5.89
Repairs		0.72
Custom hire		1.00
Hired labor		0.72
Hauling and trucking		0.73
Operating interest		0.70
Miscellaneous		1.04
Total direct expenses		46.41
Return over direct expense		12.67
<b>Overhead Expenses</b>		
Hired labor		0.47
Building leases		1.40
Farm insurance		0.38
Mach & bldg depreciation		1.22
Miscellaneous		1.02
Total overhead expenses		4.49
Total dir & ovhd expenses		50.90
Net return		8.18
Labor & management charge		1.38
Net return over lbr & mgt		6.80
<b>Cost of Production/Cwt. Carcass Sold</b>		
Total direct expense per unit		64.69
Total dir & ovhd expense per unit		69.18
With other revenue adjustments		56.86
With labor and management		58.24
Est. labor hours per unit		0.10
<b>Other Information</b>		
No. purchased or trans in		25,402
Number sold or trans out		23,634
Percentage death loss		4.4
Percent substandard hogs		2
Avg. daily gain (lb.)		1.55
Lb. of feed / lb. of gain		2.74
Feed cost per cwt. of gain		25.53
Feed cost per head		68.22
Hired labor per head		2.40
Average purchase weight		14
Avg wgt / Wean-Fin Pig sold		278
Avg purch price / head		39.13
Avg sales price / cwt.		47.90
Average carcass weight		209
Average price / cwt. carcass		64.68

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Hogs, Finish Feeder Pigs (Contract Grower) -- Average Per Pig Space**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	40		8		8	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Finish Hogs sold (lb)	-	4.90	-	7.08	-	-
Transferred out (lb)	-	18.50	-	3.53	-	39.39
Other income		17.36		26.40		3.90
Gross margin		40.75		37.01		43.29
<b>Direct Expenses</b>						
Supplies		1.51		3.03		0.10
Contract production exp.		0.41		-		1.76
Livestock insurance		0.07		-		0.47
Fuel & oil		1.06		1.04		1.19
Repairs		4.34		5.95		2.18
Custom hire		0.74		2.45		0.41
Hired labor		1.20		1.92		0.72
Utilities		0.60		-		0.81
Operating interest		0.29		-		-
Miscellaneous		0.03		0.09		0.01
Total direct expenses		10.26		14.48		7.65
Return over direct expense		30.50		22.53		35.64
<b>Overhead Expenses</b>						
Hired labor		2.12		1.35		1.08
Building leases		0.24		1.25		-
RE & pers. property taxes		0.64		0.81		0.55
Farm insurance		2.00		2.79		1.70
Utilities		2.74		4.37		1.77
Dues & professional fees		0.35		0.30		0.21
Interest		4.90		7.16		4.02
Mach & bldg depreciation		8.87		8.17		7.18
Miscellaneous		1.16		1.28		1.75
Total overhead expenses		23.02		27.49		18.26
Total dir & ovhd expenses		33.27		41.97		25.91
Net return		7.48		-4.96		17.38
Labor & management charge		6.20		7.97		8.79
Net return over lbr & mgt		1.28		-12.93		8.59
<b>Cost of Production Per Pig Space</b>						
Total direct expense per unit		10.26		14.48		7.65
Total dir & ovhd expense per unit		33.27		41.97		25.91
Est. labor hours per unit		0.40		0.56		0.41
<b>Other Information</b>						
Number of pigs		7,213		6,381		5,623
Pigs per pig space (per year)		2.30		2.50		2.35
Pigs per 100 sq. ft. (per yr)		29.37		37.65		27.59
Net return per 100 sq. ft.		95.72		-74.57		203.69
Net return per labor hour		18.64		-8.87		41.96
Square feet per pig space		7.82		6.65		8.53

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Hogs, Weaning to Finish (Contract Grower) -- Average Per Pig Space**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	63		12		13	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Wean-Fin Pig sold (lb)	-	6.37	-	15.60	-	3.74
Transferred out (lb)	-	11.93	-	2.96	-	30.14
Other income		22.76		20.25		13.06
Gross margin		41.06		38.82		46.94
<b>Direct Expenses</b>						
Supplies		1.10		1.94		0.33
Contract production exp.		1.38		0.69		-
Fuel & oil		1.57		1.45		2.37
Repairs		4.28		6.14		3.31
Custom hire		0.84		2.24		0.91
Hired labor		1.85		2.78		2.70
Utilities		0.87		0.98		0.69
Operating interest		0.44		0.88		0.14
Miscellaneous		0.22		0.17		0.16
Total direct expenses		12.53		17.27		10.61
Return over direct expense		28.53		21.55		36.33
<b>Overhead Expenses</b>						
Hired labor		0.85		1.91		0.60
Machinery leases		0.06		0.30		-
Building leases		1.08		2.13		-
RE & pers. property taxes		0.79		0.92		0.45
Farm insurance		2.03		1.90		2.32
Utilities		1.93		2.64		1.77
Dues & professional fees		0.68		0.82		0.34
Interest		5.04		6.77		3.82
Mach & bldg depreciation		8.59		11.14		7.27
Miscellaneous		0.76		0.82		0.82
Total overhead expenses		21.80		29.36		17.37
Total dir & ovhd expenses		34.34		46.63		27.98
Net return		6.73		-7.81		18.96
Labor & management charge		6.17		7.71		6.72
Net return over lbr & mgt		0.56		-15.52		12.24
<b>Cost of Production Per Pig Space</b>						
Total direct expense per unit		12.53		17.27		10.61
Total dir & ovhd expense per unit		34.34		46.63		27.98
Est. labor hours per unit		0.35		0.38		0.35
<b>Other Information</b>						
Number of pigs		7,817		7,921		7,840
Pigs per pig space (per year)		2.28		2.25		2.21
Pigs per 100 sq. ft. (per yr)		29.38		27.43		26.48
Net return per 100 sq. ft.		86.68		-95.12		226.76
Net return per labor hour		19.22		-20.35		53.45
Square feet per pig space		7.76		8.21		8.36

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Beef Cow-Calf -- Average Per Cow**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	137		27		28	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Beef Calves sold (lb)	196.9	293.90	230.2	313.81	266.9	387.69
Transferred out (lb)	205.3	317.72	193.0	278.72	168.6	273.78
Cull sales (lb)	72.8	97.82	73.1	83.03	82.8	128.33
Government payments		122.45		106.46		150.15
Other income		17.37		22.56		13.08
Purchased (lb)	-17.8	-66.80	-28.8	-56.97	-18.9	-136.81
Transferred in (lb)	-23.9	-46.77	-23.8	-47.87	-25.8	-35.01
Inventory change (lb)	33.2	66.69	81.2	-67.99	-2.9	210.40
Gross margin		802.38		631.76		991.62
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	201.9	38.47	279.1	51.39	262.5	40.88
Corn (bu.)	5.3	17.92	5.9	21.09	4.7	15.33
Corn Silage (lb.)	4,251.7	70.42	4,791.2	78.76	3,777.7	58.81
Hay, Alfalfa (lb.)	1,511.3	74.94	3,540.3	209.71	1,580.9	46.26
Hay, Grass (lb.)	2,192.2	86.91	2,881.0	118.67	2,292.1	98.00
Pasture (aum)	3.4	58.47	3.3	77.57	3.1	62.64
Hay (lb.)	2,215.1	78.51	676.0	34.88	1,266.3	46.45
Other feed stuffs (lb)	2,063.4	46.95	1,079.1	37.64	4,261.4	45.89
Veterinary		33.15		30.03		33.05
Supplies		13.37		29.72		8.04
Fuel & oil		22.09		36.52		13.00
Repairs		42.90		66.04		22.72
Operating interest		19.29		27.05		9.61
Miscellaneous		44.09		43.25		52.51
Total direct expenses		647.47		862.33		553.18
Return over direct expense		154.91		-230.57		438.44
<b>Overhead Expenses</b>						
Farm insurance		14.72		24.64		4.96
Utilities		14.38		20.98		6.20
Interest		34.32		78.82		21.19
Mach & bldg depreciation		49.95		108.92		26.49
Miscellaneous		33.51		44.89		16.97
Total overhead expenses		146.87		278.24		75.81
Total dir & ovhd expenses		794.34		1,140.57		628.99
Net return		8.04		-508.81		362.62
Labor & management charge		89.18		140.83		64.28
Net return over lbr & mgt		-81.14		-649.64		298.34
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		136.94		162.79		116.10
Total dir & ovhd expense per unit		168.00		215.31		132.01
With other revenue adjustments		135.65		217.48		62.25
With labor and management		154.51		244.07		75.74
Est. labor hours per unit		8.03		12.40		5.22
<b>Other Information</b>						
Number of cows		83.5		66.3		104.0
Pregnancy percentage		93.8		89.2		96.9
Pregnancy loss percentage		2.8		6.5		2.6
Culling percentage		11.0		11.2		13.6
Calving percentage		91.1		83.4		94.3
Weaning percentage		85.7		77.5		88.8
Calves sold per cow		0.73		0.73		0.70
Calf death loss percent		5.2		7.2		3.4
Cow death loss percent		3.4		4.9		3.3
Cows per FTE		348.9		225.8		535.9
Average weaning weight		536		552		571
Lb. weaned/exposed female		459		428		507
Feed cost per cow		472.59		629.72		414.25
Avg wgt/ Beef Calves sold		587		590		658
Avg price / cwt.		149.29		136.34		145.28

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Beef Cow-Calf -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	137		27		28	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Beef Calves sold (lb)	41.64	62.16	43.45	59.24	56.01	81.37
Transferred out (lb)	43.42	67.20	36.44	52.62	35.38	57.46
Cull sales (lb)	15.39	20.69	13.80	15.67	17.38	26.93
Government payments		25.90		20.10		31.51
Other income		3.67		4.26		2.74
Purchased (lb)	-3.76	-14.13	-5.43	-10.75	-3.97	-28.71
Transferred in (lb)	-5.05	-9.89	-4.49	-9.04	-5.42	-7.35
Inventory change (lb)	7.03	14.11	15.32	-12.84	-0.60	44.16
Gross margin		169.70		119.26		208.12
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	42.70	8.14	52.68	9.70	55.10	8.58
Corn (bu.)	1.12	3.79	1.12	3.98	0.99	3.22
Corn Silage (lb.)	899.24	14.89	904.47	14.87	792.88	12.34
Hay, Alfalfa (lb.)	319.63	15.85	668.33	39.59	331.80	9.71
Hay, Grass (lb.)	463.65	18.38	543.87	22.40	481.07	20.57
Pasture (aum)	0.72	12.37	0.62	14.64	0.65	13.15
Hay (lb.)	468.50	16.61	127.61	6.58	265.77	9.75
Other feed stuffs (lb)	436.41	9.93	203.71	7.11	894.38	9.63
Veterinary		7.01		5.67		6.94
Supplies		2.83		5.61		1.69
Fuel & oil		4.67		6.89		2.73
Repairs		9.07		12.47		4.77
Operating interest		4.08		5.11		2.02
Miscellaneous		9.33		8.16		11.02
Total direct expenses		136.94		162.79		116.10
Return over direct expense		32.76		-43.53		92.02
<b>Overhead Expenses</b>						
Farm insurance		3.11		4.65		1.04
Utilities		3.04		3.96		1.30
Interest		7.26		14.88		4.45
Mach & bldg depreciation		10.56		20.56		5.56
Miscellaneous		7.09		8.47		3.56
Total overhead expenses		31.06		52.53		15.91
Total dir & ovhd expenses		168.00		215.31		132.01
Net return		1.70		-96.05		76.11
Labor & management charge		18.86		26.59		13.49
Net return over lbr & mgt		-17.16		-122.64		62.62
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		136.94		162.79		116.10
Total dir & ovhd expense per unit		168.00		215.31		132.01
With other revenue adjustments		135.65		217.48		62.25
With labor and management		154.51		244.07		75.74
Est. labor hours per unit		1.70		2.34		1.10
<b>Other Information</b>						
Number of cows		83.5		66.3		104.0
Pregnancy percentage		93.8		89.2		96.9
Pregnancy loss percentage		2.8		6.5		2.6
Culling percentage		11.0		11.2		13.6
Calving percentage		91.1		83.4		94.3
Weaning percentage		85.7		77.5		88.8
Calves sold per cow		0.73		0.73		0.70
Calf death loss percent		5.2		7.2		3.4
Cow death loss percent		3.4		4.9		3.3
Cows per FTE		348.9		225.8		535.9
Average weaning weight		536		552		571
Lb. weaned/exposed female		459		428		507
Feed cost per cow		472.59		629.72		414.25
Avg wgt/ Beef Calves sold		587		590		658
Avg price / cwt.		149.29		136.34		145.28



**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Beef Finishing -- Average Per Head**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	83		16		17	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Finish Beef sold (lb)	1,342.0	1,457.57	1,230.9	1,271.90	1,552.3	1,756.31
Transferred out (lb)	5.4	5.89	5.8	6.71	2.3	3.11
Government payments		111.71		80.53		175.13
Other income		43.93		9.54		49.56
Purchased (lb)	-649.1	-908.64	-643.7	-881.56	-689.6	-954.41
Transferred in (lb)	-60.7	-86.25	-92.4	-141.13	-104.7	-149.18
Inventory change (lb)	57.1	13.82	176.9	143.32	-63.4	-89.34
Gross margin		638.03		489.31		791.17
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	434.7	64.40	821.2	140.34	350.9	53.12
Complete Ration (lb.)	391.1	27.21	63.6	9.08	1,123.7	53.38
Corn (bu.)	55.2	182.34	60.1	210.54	57.4	188.46
Corn Silage (lb.)	2,299.8	37.89	5,458.9	85.59	1,606.3	27.42
Hay, Alfalfa (lb.)	307.2	16.84	854.7	47.29	88.5	5.37
Hay, Grass (lb.)	242.0	11.43	365.9	19.24	55.2	2.19
Pasture (aum)	0.2	4.49	-	-	0.8	22.71
DDGS, dry (lb.)	288.9	17.67	62.6	5.64	182.4	14.72
DDGS, wet (lb.)	657.0	19.27	33.6	1.75	1,517.6	33.84
Other feed stuffs (lb)	1,322.2	32.64	1,151.3	18.25	892.5	33.78
Veterinary		18.48		18.72		17.89
Repairs		23.51		20.10		9.17
Hauling and trucking		17.55		7.06		1.93
Bedding		2.19		19.06		0.20
Operating interest		22.42		26.96		2.37
Miscellaneous		26.72		45.44		26.69
Total direct expenses		525.03		675.06		493.24
Return over direct expense		113.00		-185.75		297.93
<b>Overhead Expenses</b>						
Interest		14.40		23.33		1.93
Mach & bldg depreciation		24.62		42.04		10.30
Miscellaneous		39.06		34.43		21.90
Total overhead expenses		78.09		99.79		34.12
Total dir & ovhd expenses		603.12		774.85		527.37
Net return		34.91		-285.54		263.81
Labor & management charge		31.81		49.82		17.38
Net return over lbr & mgt		3.10		-335.36		246.42
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		110.91		124.08		106.45
Total dir & ovhd expense per unit		116.70		132.14		108.65
With other revenue adjustments		106.02		126.48		96.21
With labor and management		108.38		130.50		97.33
Est. labor hours per unit		2.10		4.16		1.22
<b>Other Information</b>						
No. purchased or trans in		270		126		272
Number sold or trans out		253		98		269
Percentage death loss		1.1		2.8		1.5
Avg. daily gain (lb.)		2.66		1.96		2.50
Lb. of conc / lb. of gain		7.57		6.42		8.83
Lb. of feed / lb. of gain		10.01		11.94		10.69
Feed cost per cwt. of gain		58.73		77.37		60.11
Feed cost per head		414.17		537.71		435.00
Hired labor per head		12.18		10.06		12.68
Average purchase weight		727		653		735
Avg wgt / Finish Beef sold		1,435		1,358		1,402
Avg purch price / cwt.		139.98		136.94		138.40
Avg sales price / cwt.		108.61		103.33		113.14

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Beef Finishing -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	83		16		17	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Finish Beef sold (lb)	190.32	206.70	177.12	183.02	214.50	242.70
Transferred out (lb)	0.76	0.83	0.84	0.97	0.32	0.43
Government payments		15.84		11.59		24.20
Other income		6.23		1.37		6.85
Purchased (lb)	-92.05	-128.86	-92.63	-126.85	-95.29	-131.89
Transferred in (lb)	-8.60	-12.23	-13.30	-20.31	-14.47	-20.61
Inventory change (lb)	8.09	1.96	25.46	20.62	-8.76	-12.35
Gross margin		90.48		70.41		109.33
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	61.64	9.13	118.17	20.19	48.49	7.34
Complete Ration (lb.)	55.47	3.86	9.16	1.31	155.27	7.38
Corn (bu.)	7.83	25.86	8.64	30.30	7.93	26.04
Corn Silage (lb.)	326.14	5.37	785.51	12.32	221.96	3.79
Hay, Alfalfa (lb.)	43.56	2.39	122.99	6.80	12.23	0.74
Hay, Grass (lb.)	34.32	1.62	52.65	2.77	7.63	0.30
Pasture (aum)	0.03	0.64	-	-	0.11	3.14
DDGS, dry (lb.)	40.97	2.51	9.01	0.81	25.20	2.03
DDGS, wet (lb.)	93.16	2.73	4.83	0.25	209.71	4.68
Other feed stuffs (lb)	187.50	4.63	165.66	2.63	123.33	4.67
Veterinary		2.62		2.69		2.47
Repairs		3.33		2.89		1.27
Hauling and trucking		2.49		1.02		0.27
Bedding		0.31		2.74		0.03
Operating interest		3.18		3.88		0.33
Miscellaneous		3.79		6.54		3.69
Total direct expenses		74.46		97.14		68.16
Return over direct expense		16.02		-26.73		41.17
<b>Overhead Expenses</b>						
Interest		2.04		3.36		0.27
Mach & bldg depreciation		3.49		6.05		1.42
Miscellaneous		5.54		4.95		3.03
Total overhead expenses		11.07		14.36		4.72
Total dir & ovhd expenses		85.53		111.50		72.87
Net return		4.95		-41.09		36.45
Labor & management charge		4.51		7.17		2.40
Net return over lbr & mgt		0.44		-48.26		34.05
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		110.91		124.08		106.45
Total dir & ovhd expense per unit		116.70		132.14		108.65
With other revenue adjustments		106.02		126.48		96.21
With labor and management		108.38		130.50		97.33
Est. labor hours per unit		0.30		0.60		0.17
<b>Other Information</b>						
No. purchased or trans in		270		126		272
Number sold or trans out		253		98		269
Percentage death loss		1.1		2.8		1.5
Avg. daily gain (lb.)		2.66		1.96		2.50
Lb. of conc / lb. of gain		7.57		6.42		8.83
Lb. of feed / lb. of gain		10.01		11.94		10.69
Feed cost per cwt. of gain		58.73		77.37		60.11
Feed cost per head		414.17		537.71		435.00
Hired labor per head		12.18		10.06		12.68
Average purchase weight		727		653		735
Avg wgt / Finish Beef sold		1,435		1,358		1,402
Avg purch price / cwt.		139.98		136.94		138.40
Avg sales price / cwt.		108.61		103.33		113.14

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Dairy -- Average Per Cow**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	305		61		61	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	24,578.6	4,888.07	20,069.2	3,878.26	26,676.8	5,470.01
Dairy Calves sold (hd)	0.3	39.55	0.3	49.26	0.4	46.34
Transferred out (hd)	0.7	48.12	0.6	42.90	0.7	45.28
Cull sales (hd)	0.3	197.88	0.3	188.93	0.3	227.59
Insurance income		26.42		17.02		45.66
Government payments		561.24		459.52		618.59
Other income		50.93		87.32		69.28
Purchased (hd)	0.0	-67.34	0.1	-79.59	0.0	-24.66
Transferred in (hd)	0.4	-36.02	0.3	-38.95	0.4	-33.09
Inventory change (hd)	0.1	80.15	0.0	-10.92	0.1	80.03
Dairy repl net cost		-686.14		-715.61		-610.26
Gross margin		5,102.87		3,878.15		5,934.77
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	3,764.2	748.59	2,396.9	530.96	3,730.4	740.55
Complete Ration (lb.)	1,806.9	428.18	2,453.9	426.84	1,722.8	455.38
Corn (bu.)	64.9	231.47	51.4	180.14	61.1	219.71
Corn Silage (lb.)	19,366.2	339.08	17,838.7	309.69	21,092.3	374.03
Hay, Alfalfa (lb.)	2,596.7	189.46	2,730.1	209.88	2,198.7	159.83
Other feed stuffs (lb)	5,300.5	249.33	6,727.3	370.67	5,109.7	230.66
Breeding fees		50.05		41.91		56.57
Veterinary		111.97		98.19		115.94
Supplies		147.15		161.61		122.11
Repairs		201.37		205.50		210.28
Custom hire		85.23		85.16		78.77
Hired labor		365.81		270.07		196.57
Hauling and trucking		86.90		101.61		91.73
Bedding		79.53		72.17		68.99
Miscellaneous		211.00		223.39		195.19
Total direct expenses		3,525.12		3,287.80		3,316.30
Return over direct expense		1,577.75		590.35		2,618.47
<b>Overhead Expenses</b>						
Hired labor		114.33		108.43		249.28
Utilities		59.71		57.93		72.57
Interest		97.23		124.06		61.13
Mach & bldg depreciation		191.95		214.11		233.94
Miscellaneous		172.47		163.17		167.34
Total overhead expenses		635.69		667.71		784.26
Total dir & ovhd expenses		4,160.80		3,955.51		4,100.56
Net return		942.06		-77.35		1,834.21
Labor & management charge		191.58		207.29		257.71
Net return over lbr & mgt		750.48		-284.64		1,576.50
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		14.26		16.27		12.36
Total dir & ovhd expense per unit		16.83		19.58		15.28
With other revenue adjustments		16.05		19.70		13.63
With labor and management		16.82		20.72		14.59
Est. labor hours per unit		37.90		35.78		38.72
<b>Other Information</b>						
Number of cows		238.5		127.0		234.1
Milk produced per cow		24,716		20,204		26,839
Lbs of protein & fat per cow		1,730		1,447		1,870
Lb. of milk sold per FTE		1,815,734		1,570,393		1,929,052
Culling percentage		28.7		29.1		29.4
Turnover rate		35.1		37.3		34.5
Cow death loss percent		5.9		7.6		4.5
Cows per milking unit		21		14		24
Feed cost per cwt. of milk		8.84		10.04		8.12
Feed cost per cow		2,186.11		2,028.20		2,180.15
Hired labor per cow		480.14		378.50		445.84
Avg. milk price per cwt.		19.89		19.32		20.50
Milk price / feed margin		11.04		9.29		12.38

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Dairy -- Average Per Cwt. Of Milk**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	305		61		61	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	99.44	19.78	99.33	19.20	99.40	20.38
Dairy Calves sold (hd)	0.00	0.16	0.00	0.24	0.00	0.17
Transferred out (hd)	0.00	0.19	0.00	0.21	0.00	0.17
Cull sales (hd)	0.00	0.80	0.00	0.94	0.00	0.85
Insurance income		0.11		0.08		0.17
Government payments		2.27		2.27		2.30
Other income		0.21		0.43		0.26
Purchased (hd)	0.00	-0.27	0.00	-0.39	0.00	-0.09
Transferred in (hd)	0.00	-0.15	0.00	-0.19	0.00	-0.12
Inventory change (hd)	0.00	0.32	0.00	-0.05	0.00	0.30
Dairy repl net cost		-2.78		-3.54		-2.27
Gross margin		20.65		19.20		22.11
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	15.23	3.03	11.86	2.63	13.90	2.76
Complete Ration (lb.)	7.31	1.73	12.15	2.11	6.42	1.70
Corn (bu.)	0.26	0.94	0.25	0.89	0.23	0.82
Corn Silage (lb.)	78.35	1.37	88.29	1.53	78.59	1.39
Hay, Alfalfa (lb.)	10.51	0.77	13.51	1.04	8.19	0.60
Other feed stuffs (lb)	21.45	1.01	33.30	1.83	19.04	0.86
Breeding fees		0.20		0.21		0.21
Veterinary		0.45		0.49		0.43
Supplies		0.60		0.80		0.45
Fuel & oil		0.27		0.33		0.25
Repairs		0.81		1.02		0.78
Custom hire		0.34		0.42		0.29
Hired labor		1.48		1.34		0.73
Hauling and trucking		0.35		0.50		0.34
Bedding		0.32		0.36		0.26
Miscellaneous		0.58		0.78		0.48
Total direct expenses		14.26		16.27		12.36
Return over direct expense		6.38		2.92		9.76
<b>Overhead Expenses</b>						
Hired labor		0.46		0.54		0.93
Interest		0.39		0.61		0.23
Mach & bldg depreciation		0.78		1.06		0.87
Miscellaneous		0.94		1.09		0.89
Total overhead expenses		2.57		3.30		2.92
Total dir & ovhd expenses		16.83		19.58		15.28
Net return		3.81		-0.38		6.83
Labor & management charge		0.78		1.03		0.96
Net return over lbr & mgt		3.04		-1.41		5.87
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		14.26		16.27		12.36
Total dir & ovhd expense per unit		16.83		19.58		15.28
With other revenue adjustments		16.05		19.70		13.63
With labor and management		16.82		20.72		14.59
Est. labor hours per unit		0.15		0.18		0.14
<b>Other Information</b>						
Number of cows		238.5		127.0		234.1
Milk produced per cow		24,716		20,204		26,839
Lbs of protein & fat per cow		1,730		1,447		1,870
Lb. of milk sold per FTE		1,815,734		1,570,393		1,929,052
Culling percentage		28.7		29.1		29.4
Turnover rate		35.1		37.3		34.5
Cow death loss percent		5.9		7.6		4.5
Cows per milking unit		21		14		24
Feed cost per cwt. of milk		8.84		10.04		8.12
Feed cost per cow		2,186.11		2,028.20		2,180.15
Hired labor per cow		480.14		378.50		445.84
Avg. milk price per cwt.		19.89		19.32		20.50
Milk price / feed margin		11.04		9.29		12.38

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Dairy Replacement Heifers -- Average Per Head**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	282		56		57	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Replacements sold (hd)	0.1	47.43	0.1	29.07	0.1	95.64
Transferred out (hd)	0.4	560.53	0.4	352.57	0.5	711.96
Cull sales (hd)	0.0	4.68	0.0	7.45	0.0	2.78
Government payments		1.07		5.90		-
Other income		1.41		1.84		1.38
Purchased (hd)	0.0	-8.15	0.0	-15.45	0.0	-14.03
Transferred in (hd)	0.6	-106.97	0.4	-75.28	0.6	-121.75
Inventory change (hd)	0.0	24.19	-0.1	-52.42	0.1	77.56
Gross margin		524.19		253.68		753.54
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	374.0	83.34	659.1	156.12	286.6	44.91
Milk Replacer (lb.)	19.3	22.86	9.9	11.99	4.7	5.93
Complete Ration (lb.)	703.6	82.29	1,448.4	55.50	413.8	91.63
Corn (bu.)	6.1	21.10	9.7	33.67	4.4	15.17
Corn Silage (lb.)	5,160.0	88.33	4,965.6	85.94	4,251.7	70.16
Hay, Alfalfa (lb.)	1,037.0	66.84	1,980.4	108.36	557.8	36.11
Hay, Grass (lb.)	644.1	32.50	300.9	16.00	614.3	30.89
Hay (lb.)	169.0	8.87	564.5	30.33	22.1	1.20
Other feed stuffs (lb)	1,747.1	69.41	2,965.7	104.90	1,265.0	40.69
Breeding fees		16.49		13.32		17.94
Veterinary		21.03		18.27		22.15
Contract production exp.		118.57		134.86		150.05
Repairs		32.98		36.66		29.12
Custom hire		8.37		34.43		5.37
Hired labor		39.21		37.48		26.25
Bedding		23.28		22.52		19.88
Miscellaneous		35.56		45.41		36.52
Total direct expenses		771.05		945.78		643.96
Return over direct expense		-246.85		-692.11		109.58
<b>Overhead Expenses</b>						
Hired labor		20.72		23.84		21.50
Interest		16.29		17.93		15.62
Mach & bldg depreciation		33.85		35.60		31.47
Miscellaneous		35.93		29.52		37.91
Total overhead expenses		106.79		106.88		106.49
Total dir & ovhd expenses		877.84		1,052.67		750.44
Net return		-353.65		-798.99		3.09
Labor & management charge		34.85		45.82		23.32
Net return over lbr & mgt		-388.49		-844.81		-20.23
<b>Cost of Production Per Head Per Day</b>						
Total direct expense per unit		2.35		2.96		1.92
Total dir & ovhd expense per unit		2.64		3.25		2.21
With other revenue adjustments		2.63		3.23		2.20
With labor and management		2.73		3.36		2.27
Est. labor hours per unit		6.03		5.20		5.51
<b>Other Information</b>						
No. purchased or trans in		127		82		173
Number sold or trans out		114		95		144
Average number of head		209		182		254
Percentage death loss		3.9		4.3		2.6
Feed cost per average head		475.54		602.83		336.68
Hired labor per average head		59.93		61.31		47.74
Feed cost/head sold/trans		868.61		1,151.97		592.84
Total cost/head sold/trans		1,820.12		2,343.69		1,457.69
Feed cost per head per day		1.30		1.65		0.92
Avg. purch price / head		553.10		1,049.33		429.59
Avg. sales price / head		437.15		326.46		828.63

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Dairy and Repl Heifers -- Average Per Cow**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	263		52		53	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	24,847.8	4,934.53	20,057.4	3,882.17	26,746.1	5,468.73
Dairy Calves sold (hd)	-	68.84	-	68.22	-	102.04
Transferred out (hd)	-	39.57	-	35.79	-	40.18
Cull sales (hd)	-	204.59	-	201.72	-	231.99
Insurance income		26.22		9.90		45.34
Government payments		588.72		525.57		636.13
Other income		28.06		54.28		55.85
Purchased (hd)	-	-68.95	-	-53.57	-	-20.36
Transferred in (hd)	-	-3.28	-	-1.56	-	-0.03
Inventory change (hd)	-	100.29	-	-50.97	-	108.19
Gross margin		5,918.58		4,671.54		6,668.07
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	4,144.7	812.96	2,984.3	695.99	4,246.7	819.24
Complete Ration (lb.)	2,470.2	516.89	4,876.0	501.59	1,944.9	521.99
Corn (bu.)	69.0	246.18	56.0	196.44	66.2	234.15
Corn Silage (lb.)	23,657.1	415.72	22,404.1	401.12	26,109.0	461.75
Hay, Alfalfa (lb.)	3,644.5	256.23	4,108.4	299.85	3,582.4	236.17
Other feed stuffs (lb)	6,907.3	332.00	8,319.0	452.70	6,422.3	306.60
Breeding fees		66.02		49.90		70.22
Veterinary		131.95		109.87		138.43
Supplies		155.62		154.00		131.17
Contract production exp.		141.14		24.12		99.13
Repairs		229.61		226.04		234.93
Custom hire		91.96		89.02		86.91
Hired labor		416.53		252.39		206.39
Hauling and trucking		89.75		93.05		97.38
Bedding		101.24		100.28		88.33
Miscellaneous		224.74		226.71		201.70
Total direct expenses		4,228.52		3,873.06		3,934.48
Return over direct expense		1,690.06		798.47		2,733.60
<b>Overhead Expenses</b>						
Hired labor		124.19		141.96		274.76
Interest		106.68		162.65		72.72
Mach & bldg depreciation		215.20		246.33		267.93
Miscellaneous		261.22		228.14		276.35
Total overhead expenses		707.30		779.07		891.75
Total dir & ovhd expenses		4,935.82		4,652.13		4,826.22
Net return		982.77		19.40		1,841.85
Labor & management charge		216.13		234.67		303.30
Net return over lbr & mgt		766.64		-215.27		1,538.55
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		16.92		19.15		14.62
Total dir & ovhd expense per unit		19.75		23.01		17.93
With other revenue adjustments		15.89		19.24		13.56
With labor and management		16.76		20.40		14.69
Est. labor hours per unit		43.89		41.78		44.36
<b>Other Information</b>						
Number of cows		251.7		124.2		252.2
Milk produced per cow		24,993		20,220		26,915
Lbs of protein & fat per cow		1,745		1,428		1,869
Lb. of milk sold per FTE		1,585,105		1,344,072		1,688,130
Culling percentage		29.0		29.3		29.6
Turnover rate		35.2		36.9		34.6
Cow death loss percent		5.7		6.8		4.3
Cows per milking unit		21		14		24
Feed cost per cwt. of milk		10.32		12.60		9.59
Feed cost per cow		2,579.98		2,547.69		2,579.90
Hired labor per cow		540.72		394.35		481.14
Avg. milk price per cwt.		19.86		19.36		20.45
Milk price / feed margin		9.54		6.76		10.86

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Dairy Finishing -- Average Per Head**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	85		17		17	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Dairy Finish sold (lb)	1,372.8	1,320.63	1,279.1	1,154.38	1,352.9	1,347.68
Transferred out (lb)	6.6	7.64	57.5	66.30	-	-
Government payments		122.56		123.16		164.31
Other income		32.77		62.42		17.45
Purchased (lb)	-440.6	-469.72	-237.7	-299.81	-432.2	-409.32
Transferred in (lb)	-59.2	-64.79	-48.8	-51.88	-24.8	-38.82
Inventory change (lb)	58.2	81.91	-147.3	-152.99	256.8	306.76
Gross margin		1,031.00		901.60		1,388.06
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	581.4	120.11	445.7	79.86	614.7	139.60
Milk (lb.)	52.2	7.94	56.4	6.85	185.0	29.38
Complete Ration (lb.)	231.2	45.86	538.7	109.98	251.4	50.72
Corn (bu.)	101.8	338.06	130.5	426.26	91.1	287.60
DDGS, wet (lb.)	527.9	18.85	930.8	20.17	572.6	21.61
Corn snaplage (lb.)	409.9	14.74	-	-	1,598.0	59.92
Other feed stuffs (lb)	1,725.1	56.39	1,648.2	75.79	811.7	29.56
Veterinary		22.82		27.29		15.08
Contract production exp.		7.33		-		25.84
Fuel & oil		11.48		17.52		10.34
Repairs		27.26		33.41		30.02
Hired labor		12.07		11.37		30.15
Hauling and trucking		12.41		14.56		12.74
Marketing		16.45		5.53		12.21
Operating interest		18.42		18.07		13.25
Miscellaneous		32.02		36.16		19.53
Total direct expenses		762.21		882.80		787.57
Return over direct expense		268.78		18.79		600.49
<b>Overhead Expenses</b>						
Interest		18.45		22.88		10.00
Mach & bldg depreciation		37.12		42.57		19.54
Miscellaneous		42.61		38.64		31.10
Total overhead expenses		98.17		104.10		60.65
Total dir & ovhd expenses		860.38		986.90		848.22
Net return		170.61		-85.31		539.84
Labor & management charge		42.75		63.96		36.36
Net return over lbr & mgt		127.86		-149.26		503.48
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		86.81		100.73		67.38
Total dir & ovhd expense per unit		93.93		108.52		71.86
With other revenue adjustments		83.92		97.71		59.71
With labor and management		87.02		102.49		62.40
Est. labor hours per unit		4.06		5.49		4.24
<b>Other Information</b>						
No. purchased or trans in		241		125		213
Number sold or trans out		211		116		174
Percentage death loss		3.3		5.4		2.2
Avg. daily gain (lb.)		2.40		2.12		2.60
Lb. of conc / lb. of gain		8.01		10.29		7.11
Lb. of feed / lb. of gain		8.81		11.31		7.07
Feed cost per cwt. of gain		63.12		76.08		53.38
Feed cost per head		601.95		718.90		618.40
Hired labor per head		21.18		16.61		38.46
Average purchase weight		495		305		636
Avg wgt / Dairy Finish sold		1,402		1,412		1,359
Avg purch price / head		527.21		384.74		602.17
Avg sales price / cwt.		96.20		90.25		99.62

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Dairy Finishing -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
	85		17		17	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Dairy Finish sold (lb)	143.95	138.48	135.36	122.16	116.78	116.33
Transferred out (lb)	0.69	0.80	6.09	7.02	-	-
Government payments		12.85		13.03		14.18
Other income		3.44		6.61		1.51
Purchased (lb)	-46.20	-49.25	-25.15	-31.73	-37.31	-35.33
Transferred in (lb)	-6.21	-6.79	-5.16	-5.49	-2.14	-3.35
Inventory change (lb)	6.11	8.59	-15.59	-16.19	22.16	26.48
Gross margin		108.11		95.41		119.82
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	60.97	12.59	47.16	8.45	53.06	12.05
Milk (lb.)	5.47	0.83	5.96	0.72	15.97	2.54
Complete Ration (lb.)	24.25	4.81	57.00	11.64	21.70	4.38
Corn (bu.)	10.68	35.45	13.81	45.11	7.86	24.83
DDGS, wet (lb.)	55.35	1.98	98.50	2.13	49.43	1.87
Corn snaplage (lb.)	42.99	1.55	-	-	137.94	5.17
Other feed stuffs (lb)	180.89	5.91	174.42	8.02	70.07	2.55
Veterinary		2.39		2.89		1.30
Contract production exp.		0.77		-		2.23
Fuel & oil		1.20		1.85		0.89
Repairs		2.86		3.54		2.59
Hired labor		1.27		1.20		2.60
Hauling and trucking		1.30		1.54		1.10
Marketing		1.72		0.58		1.05
Operating interest		1.93		1.91		1.14
Miscellaneous		3.36		3.83		1.69
Total direct expenses		79.92		93.42		67.98
Return over direct expense		28.18		1.99		51.83
<b>Overhead Expenses</b>						
Interest		1.93		2.42		0.86
Mach & bldg depreciation		3.89		4.51		1.69
Miscellaneous		4.47		4.09		2.68
Total overhead expenses		10.29		11.02		5.23
Total dir & ovhd expenses		90.22		104.44		73.22
Net return		17.89		-9.03		46.60
Labor & management charge		4.48		6.77		3.14
Net return over lbr & mgt		13.41		-15.80		43.46
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		86.81		100.73		67.38
Total dir & ovhd expense per unit		93.93		108.52		71.86
With other revenue adjustments		83.92		97.71		59.71
With labor and management		87.02		102.49		62.40
Est. labor hours per unit		0.43		0.58		0.37
<b>Other Information</b>						
No. purchased or trans in		241		125		213
Number sold or trans out		211		116		174
Percentage death loss		3.3		5.4		2.2
Avg. daily gain (lb.)		2.40		2.12		2.60
Lb. of conc / lb. of gain		8.01		10.29		7.11
Lb. of feed / lb. of gain		8.81		11.31		7.07
Feed cost per cwt. of gain		63.12		76.08		53.38
Feed cost per head		601.95		718.90		618.40
Hired labor per head		21.18		16.61		38.46
Average purchase weight		495		305		636
Avg wgt / Dairy Finish sold		1,402		1,412		1,359
Avg purch price / head		527.21		384.74		602.17
Avg sales price / cwt.		96.20		90.25		99.62



**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Sheep, Market Lamb Prod -- Average Per Ewe**

	<u>Avg. Of</u> <u>All Farms</u>	
Number of farms	6	
	Quantity	Value
Lambs sold (lb)	7.1	1.85
Mkt Lambs sold (lb)	159.8	225.54
Transferred out (lb)	0.2	0.24
Cull sales (lb)	23.4	13.21
Government payments		38.68
Other income		0.28
Purchased (lb)	-0.4	-4.83
Inventory change (lb)	-17.1	-28.76
Gross margin		246.21
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	355.9	33.83
Milk Replacer (lb.)	5.6	6.02
Complete Ration (lb.)	136.8	18.73
Corn (bu.)	8.7	27.94
Corn Silage (lb.)	877.4	14.91
Hay, Alfalfa (lb.)	346.1	18.65
Hay, Grass (lb.)	195.8	7.34
Haylage, Alfalfa (lb.)	647.8	18.35
Oatlage (lb.)	99.1	1.53
Sorghum Silage (lb.)	55.0	1.38
Other feed stuffs (lb)	132.6	16.95
Veterinary		6.03
Repairs		22.70
Bedding		5.52
Miscellaneous		38.18
Total direct expenses		238.08
Return over direct expense		8.13
<b>Overhead Expenses</b>		
Mach & bldg depreciation		25.16
Miscellaneous		21.40
Total overhead expenses		46.56
Total dir & ovhd expenses		284.64
Net return		-38.43
Labor & management charge		57.90
Net return over lbr & mgt		-96.34
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		143.28
Total dir & ovhd expense per unit		171.30
With other revenue adjustments		144.67
With labor and management		179.51
Est. labor hours per unit		4.02
<b>Other Information</b>		
Number of ewes		212.0
Pregnancy percentage		95.8
Pregnancy loss percentage		0.4
Female turnover rate		14.70
Lambs born / ewe exposed		1.62
Lambs born / ewe lambing		1.70
Lambs weaned/ewe exposed		1.44
Lambs sold per ewe		1.20
Lamb dth loss (died/born)		15.5
Ewe death loss percentage		10.9
Ewes per FTE		697.3
Average weaning weight		51
Lb. weaned/exposed female		74
Feed cost per ewe		165.63
Avg wgt/Mkt Lambs sold		134
Avg price / cwt.		141.12

**Livestock Enterprise Analysis**  
**Minnesota Farm Business Management Statewide Data**  
**(Farms Sorted By Net Return)**

**Sheep, Market Lamb Prod -- Average Per Cwt. Produced**

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	6	
	Quantity	Value
Lambs sold (lb)	4.28	1.11
Mkt Lambs sold (lb)	96.18	135.73
Transferred out (lb)	0.10	0.14
Cull sales (lb)	14.07	7.95
Government payments		23.28
Other income		0.17
Purchased (lb)	-0.21	-2.91
Inventory change (lb)	-10.29	-17.31
Gross margin		148.17
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	214.18	20.36
Complete Ration (lb.)	82.32	11.27
Corn (bu.)	5.26	16.82
Corn Silage (lb.)	528.00	8.97
Hay, Alfalfa (lb.)	208.29	11.22
Hay, Grass (lb.)	117.84	4.42
Haylage, Alfalfa (lb.)	389.85	11.04
Oatlage (lb.)	59.61	0.92
Sorghum Silage (lb.)	33.12	0.83
Other feed stuffs (lb)	83.17	13.82
Veterinary		3.63
Supplies		6.63
Repairs		13.66
Bedding		3.32
Miscellaneous		16.35
Total direct expenses		143.28
Return over direct expense		4.89
<b>Overhead Expenses</b>		
Mach & bldg depreciation		15.14
Miscellaneous		12.88
Total overhead expenses		28.02
Total dir & ovhd expenses		171.30
Net return		-23.13
Labor & management charge		34.85
Net return over lbr & mgt		-57.98
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		143.28
Total dir & ovhd expense per unit		171.30
With other revenue adjustments		144.67
With labor and management		179.51
Est. labor hours per unit		2.42
<b>Other Information</b>		
Number of ewes		212.0
Pregnancy percentage		95.8
Pregnancy loss percentage		0.4
Female turnover rate		14.70
Lambs born / ewe exposed		1.62
Lambs born / ewe lambing		1.70
Lambs weaned/ewe exposed		1.44
Lambs sold per ewe		1.20
Lamb dth loss (died/born)		15.5
Ewe death loss percentage		10.9
Ewes per FTE		697.3
Average weaning weight		51
Lb. weaned/exposed female		74
Feed cost per ewe		165.63
Avg wgt/Mkt Lambs sold		134
Avg price / cwt.		141.12

# Summary Tables

## Financial Summary by Years

A better picture of the current financial performance can be seen by comparing this year to previous years in the *Summary by Years* table. All items are taken from the annual report for that year. Monetary values are left in nominal terms unadjusted for inflation. The one exception is the *Net Farm Income (Constant \$)* using the Consumer Price Index (CPI-U) from the U. S. Department of Commerce. This shows the changes in “buying power” for the farmers, compared to the current year. The CPI used is reported below.

<u>Year</u>	<u>CPI-U</u> <u>1982-84=100</u>	<u>Year</u>	<u>CPI-U</u> <u>1982-84=100</u>
1999	166.6	2010	218.1
2000	172.2	2011	224.9
2001	177.1	2012	229.6
2002	179.9	2013	233.0
2003	184.0	2014	236.7
2004	188.9	2015	237.0
2005	195.3	2016	240.0
2006	201.6	2017	245.1
2007	207.3	2018	251.1
2008	215.3	2019	255.7
2009	214.5	2020	258.8

## Financial Summary by Farm Size (Gross Farm Income)

This table summarizes whole-farm financial performance by size of farm. Farms are categorized based on gross farm income.

## Financial Summary by Farm Type

This table summarizes whole-farm financial performance by type of farm. Farm type is assigned based on greater than 70 percent of sales from that commodity or combination of commodities.

## Financial Summary by Debt to Asset Ratio

This table summarizes whole-farm financial performance by debt level. Farms are categorized based on total farm and non-farm Debt to Asset Ratio.

## Financial Summary by Age of Operator

This table summarizes whole-farm financial performance based on age of the primary operator.

**SUMMARY OF THE WHOLE FARM ANALYSIS BY YEARS**  
**Southwest Minnesota Farm Business Management Association**  
(Overall averages for all farms reporting)

Row	Items	2001	2002	2003	2004	2005	2006	2007	2008	2009
1	Number of Farms	207	188	175	125	107	110	107	99	95
<b>Farm Income Statement</b>										
2	Gross Cash Farm Income	433,698	428,084	504,022	496,771	579,201	609,886	731,897	876,375	878,404
3	Total Cash Farm Expense	358,506	352,995	400,605	404,743	477,476	494,409	592,841	720,364	743,487
4	Inventory Change	-17,297	19,571	18,977	31,076	74,307	66,397	135,843	70,051	-21,159
5	Depr. & Cap. Adj.	-21,280	-24,654	-25,990	-24,741	-28,170	-27,176	-32,631	-39,437	-43,972
6	Net Farm Income from Operations	36,614	70,007	96,404	98,362	147,862	154,698	242,267	186,625	69,787
7	Gain or Loss on Capital Sales	0	0	0	0	0	0	0	4,276	0
8	Net Farm Income	36,614	70,007	96,404	98,362	147,862	154,698	242,267	190,901	69,787
9	Net Farm Income (Constant \$)	56,877	102,303	138,685	138,348	202,576	204,997	311,005	238,327	83,887
<b>Profitability*</b>										
10	Rate of Return on Assets (%)	6	9	11	11	14	13	17	11	3
11	Rate of Return on Equity (%)	4	11	16	16	21	19	25	15	2
12	Operating Profit Margin (%)	14	20	24	23	28	28	35	26	9
13	Asset Turnover Rate (%)	39	44	44	46	51	48	50	43	37
14	Value of Farm Production	282,583	345,743	379,505	378,450	478,073	512,081	648,768	658,576	608,181
15	Farm Interest Paid	27,203	26,739	25,262	21,824	22,210	27,677	30,714	30,232	29,727
<b>Liquidity, Repayment and Efficiency</b>										
16	Current Ratio	1.5	1.6	1.7	1.9	2.1	2.2	2.5	2.6	2.3
17	Working Capital	83,500	117,135	143,632	155,804	218,745	268,567	393,911	446,350	404,104
18	Working Capital to Gross Revenue (%)	20	25	28	30	34	40	46	49	45
19	Term Debt Coverage Ratio	1.0	1.6	2.2	2.1	3.0	3.1	4.1	2.9	1.1
20	Operating Expense Ratio (%)	79.5	73.6	71.5	72.1	69.2	68.7	64.1	71.6	83.6
21	Interest Expense Ratio (%)	6.6	5.8	4.8	4.2	3.5	4.3	3.7	3.3	3.3
<b>Solvency (Year-end, Sole Proprietors Only)*</b>										
22	No. of Sole Proprietors	178	161	149	109	91	93	91	85	80
23	Total Assets	1,158,071	1,277,823	1,407,919	1,286,775	1,487,232	1,694,428	2,034,365	2,208,883	2,376,886
24	Total Liabilities	539,918	578,253	619,279	554,962	618,105	698,239	810,184	837,830	892,734
25	Net Worth	618,197	699,570	788,640	731,813	869,127	996,189	1,224,181	1,371,053	1,484,151
26	Debt to Asset Ratio (%)	47	45	44	43	42	41	40	38	38
<b>Acreage Information</b>										
27	Total Acres Owned	252	265	263	236	241	243	241	249	250
28	Total Crop Acres Farmed	759	784	794	766	792	797	825	822	831
29	Crop Acres Owned	214	226	239	193	199	197	208	222	224
30	Crop Acres Cash Rented	468	490	489	494	532	526	546	536	555
31	Crop Acres Share Rented	77	68	67	79	61	74	71	64	52
<b>Crop Yields</b>										
32	Corn per acre (bu.)	128	151	157	171	192	169	162	172	185
33	Soybeans per acre (bu.)	42	49	39	41	55	51	49	44	49
<b>Crop Prices Received (cash sales)</b>										
34	Corn per Bushel	1.72	1.95	2.07	2.28	1.89	2.04	3.00	4.51	3.83
35	Soybeans per Bushel	4.32	4.57	5.73	7.17	5.88	5.57	7.14	10.83	10.15
<b>Household Information</b>										
36	No. Farms Reporting HseHld Info	124	108	102	73	67	66	60	62	52
37	Average Family Size	3.5	3.6	3.4	3.4	3.4	3.3	3.1	3.0	3.3
38	Family living expense	39,793	41,882	43,383	48,371	50,608	51,569	56,229	59,939	62,182
39	Total Family Use of Cash	63,980	51,826	68,470	68,029	74,513	82,670	98,388	100,933	123,590
40	Net Nonfarm Income	20,082	20,846	22,480	23,733	24,774	31,059	25,164	28,456	29,369

\* Beginning in 1993, profitability is analyzed using assets valued at adjusted cost basis while solvency is at estimated fair market value. Prior to 1993, profitability and solvency were analyzed using land valued with a conservative market value and all other assets valued at cost basis.

SUMMARY OF THE WHOLE FARM ANALYSIS BY YEARS (continued)  
 Southwest Minnesota Farm Business Management Association  
 (Overall averages for all farms reporting)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Row
----	----	----	----	----	----	----	----	----	----	----	----
97	107	110	117	109	103	103	104	101	106	108	1
970,471	1,150,686	1,332,519	1,285,081	1,086,085	997,581	918,546	941,931	865,101	946,154	1,099,964	2
781,053	898,752	1,057,018	1,029,631	856,705	798,226	748,909	783,231	703,195	783,687	931,696	3
178,977	136,582	157,209	-53,364	-49,479	-68,430	-8,515	-7,784	-25,846	52,089	221,729	4
-48,085	-55,244	-66,085	-69,322	-70,801	-73,028	-71,987	-74,624	-68,737	-71,520	-76,433	5
320,310	333,272	366,624	132,764	109,100	57,897	89,135	76,292	67,324	143,035	313,564	6
1,855	3,015	10,447	4,404	9,296	1,944	-418	8,475	4,732	1,969	8,838	7
322,165	336,287	377,071	137,168	118,396	59,841	88,717	84,767	72,056	145,004	322,402	8
388,701	399,042	433,908	154,613	131,506	65,428	96,877	89,505	74,266	146,762	322,402	9
17	16	14	4	3	1	3	2	2	5	10	10
24	21	19	4	3	0	2	1	0	5	14	11
36	35	30	11	10	4	8	7	6	16	28	12
47	46	46	34	34	31	31	30	29	31	36	13
819,691	871,265	1,052,663	819,449	790,270	729,443	738,186	735,601	716,296	772,867	989,072	14
34,124	28,447	27,141	27,405	26,239	27,225	30,723	35,049	37,490	43,563	40,368	15
2.9	3.3	3.1	2.7	2.6	2.2	1.9	1.8	1.9	2.1	2.4	16
568,438	659,446	771,719	646,719	562,147	455,840	395,033	367,795	364,975	419,247	601,113	17
50	52	52	52	54	49	42	39	42	42	46	18
5.2	5.6	4.6	1.8	1.4	0.9	1.4	1.3	1.3	2.3	4.3	19
64.8	66.9	69.1	81.4	80.0	83.0	79.0	80.1	80.1	74.0	66.8	20
3.0	2.3	1.8	2.2	2.6	3.0	3.0	3.8	4.3	4.4	3.1	21
80	87	85	89	84	81	81	83	80	85	90	22
2,719,826	2,922,324	3,515,081	3,667,344	3,670,892	3,953,187	3,994,222	4,126,516	4,140,478	4,275,004	4,396,884	23
987,753	1,068,183	1,057,882	1,271,925	1,241,969	1,283,940	1,297,771	1,329,095	1,313,213	1,306,029	1,357,861	24
1,732,074	1,854,181	2,288,721	2,395,419	2,428,924	2,669,246	2,696,451	2,797,420	2,827,265	2,968,975	3,039,023	25
36	37	35	35	34	32	32	32	32	31	31	26
240	232	216	211	208	210	210	226	240	235	226	27
831	791	886	845	902	940	939	940	947	940	906	28
221	202	205	203	208	226	236	233	233	233	237	29
550	532	617	592	626	661	651	661	665	659	629	30
61	57	63	50	67	53	53	46	48	48	40	31
184	173	162	175	167	204	207	204	175	164	201	32
51	46	47	52	48	58	62	55	53	49	58	33
3.67	5.29	6.27	6.48	4.35	3.63	3.38	3.17	3.27	3.58	3.37	34
9.72	11.58	13.07	13.97	12.73	10.12	8.92	9.23	9.20	8.46	9.08	35
46	43	42	32	41	32	44	45	34	39	35	36
3.0	3.0	2.9	3.0	2.8	3.1	3.0	2.6	2.6	2.9	2.5	37
63,848	73,704	73,904	72,592	73,073	64,621	73,384	69,964	72,096	66,585	62,504	38
108,468	119,913	135,406	159,539	140,853	158,913	125,223	116,348	110,123	99,802	100,287	39
29,543	35,042	30,841	35,723	42,073	36,083	39,590	38,552	41,141	47,034	51,952	40

**Financial Summary**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Gross Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Less than 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>1,000,001 - 2,000,000</u>	<u>Over 2,000,000</u>
Number of farms	108	6	13	26	39	14	10
<b>Income Statement</b>							
Gross cash farm income	1,099,964	62,114	173,201	376,688	707,606	1,257,639	6,117,435
Total cash farm expense	931,696	65,125	140,132	257,107	539,379	957,928	5,727,917
Net cash farm income	168,268	-3,011	33,069	119,581	168,227	299,712	389,519
Inventory change	221,729	30,645	60,777	59,243	180,010	131,745	1,256,761
Depreciation	-76,433	-2,015	-13,208	-38,543	-72,630	-116,647	-260,319
Net farm income from operations	313,564	25,619	80,638	140,282	275,607	314,810	1,385,960
Gain or loss on capital sales	8,838	-39	1,097	661	27,815	-8,782	-3,858
Average net farm income	322,402	25,580	81,735	140,943	303,422	306,027	1,382,102
Median net farm income	189,658	26,122	71,365	125,934	257,900	314,408	1,616,749
<b>Profitability (cost)</b>							
Rate of return on assets	10.1 %	7.8 %	12.3 %	7.1 %	9.2 %	8.0 %	13.3 %
Rate of return on equity	13.6 %	22.8 %	14.6 %	7.9 %	11.5 %	10.9 %	20.7 %
Operating profit margin	28.4 %	28.3 %	27.9 %	26.2 %	28.5 %	23.3 %	31.0 %
Asset turnover rate	35.7 %	27.6 %	44.0 %	26.9 %	32.3 %	34.1 %	43.1 %
<b>Profitability (market)</b>							
Rate of return on assets	6.2 %	5.8 %	7.1 %	3.5 %	4.8 %	6.1 %	9.7 %
Rate of return on equity	8.5 %	16.9 %	8.8 %	4.0 %	6.1 %	8.9 %	15.5 %
Operating profit margin	24.9 %	21.3 %	28.3 %	21.4 %	22.9 %	24.3 %	27.2 %
Asset turnover rate	25.1 %	27.1 %	25.2 %	16.3 %	20.8 %	25.2 %	35.6 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	1,023,693	97,751	205,444	475,537	915,196	1,156,172	4,305,856
Current liabilities	422,580	49,467	40,712	136,201	268,633	521,808	2,348,932
Current ratio	2.42	1.98	5.05	3.49	3.41	2.22	1.83
Working capital	601,113	48,284	164,732	339,336	646,563	634,364	1,956,924
Change in working capital	190,371	11,903	63,738	79,089	188,310	191,120	758,400
Working capital to gross inc	46.3 %	52.5 %	72.6 %	78.6 %	74.4 %	46.2 %	27.1 %
Term debt coverage ratio	4.34	6.50	8.96	4.09	4.73	2.95	4.60
Replacement coverage ratio	2.79	5.97	4.98	2.18	2.45	2.02	3.75
Term debt to EBITDA	1.33	5.69	0.50	1.03	1.38	1.76	1.23
<b>Solvency (end of year at cost)</b>							
Number of farms	108	6	13	26	39	14	10
Total assets	3,433,838	548,965	910,262	2,095,525	3,341,634	4,451,699	10,859,611
Total liabilities	1,102,126	313,481	261,369	418,020	872,997	1,638,516	4,589,628
Net worth	2,331,712	235,484	648,894	1,677,504	2,468,637	2,813,183	6,269,983
Net worth change	305,090	61,593	81,993	123,566	273,183	365,132	1,253,554
Farm debt to asset ratio	35 %	73 %	28 %	22 %	29 %	42 %	42 %
Total debt to asset ratio	32 %	57 %	29 %	20 %	26 %	37 %	42 %
Change in earned net worth %	15 %	35 %	14 %	8 %	12 %	15 %	25 %
<b>Solvency (end of year at market)</b>							
Number of farms	108	6	13	26	39	14	10
Total assets	4,877,687	578,545	1,394,332	3,287,554	5,299,223	5,855,318	13,107,204
Total liabilities	1,703,515	330,180	404,379	812,680	1,594,705	2,349,707	6,052,253
Net worth	3,174,172	248,365	989,953	2,474,873	3,704,517	3,505,610	7,054,951
Total net worth change	293,984	57,017	97,418	123,703	265,955	401,430	1,093,321
Farm debt to asset ratio	38 %	77 %	30 %	27 %	34 %	45 %	46 %
Total debt to asset ratio	35 %	57 %	29 %	25 %	30 %	40 %	46 %
Change in total net worth %	10 %	30 %	11 %	5 %	8 %	13 %	18 %
<b>Nonfarm Information</b>							
Net nonfarm income	51,952	57,726	69,513	61,226	57,857	25,177	16,005
Farms reporting living expenses	35	3	3	11	14	4	-
Total family living expense	62,504	-	-	66,111	66,954	-	-
Total living, invest, cap. purch	100,287	-	-	102,153	116,816	-	-
<b>Crop Acres</b>							
Total crop acres	906	122	260	468	887	1,243	2,961
Total crop acres owned	237	21	54	180	273	356	447
Total crop acres cash rented	629	100	151	224	581	887	2,450
Total crop acres share rented	40	-	55	64	34	-	64
Machinery value per crop acre	748	148	390	924	859	801	570

**Financial Summary**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Farm Type)**

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Other</u>
Number of farms	108	66	22
<b>Income Statement</b>			
Gross cash farm income	1,099,964	670,636	579,852
Total cash farm expense	931,696	531,299	424,281
Net cash farm income	168,268	139,337	155,571
Inventory change	221,729	193,584	84,747
Depreciation	-76,433	-63,401	-58,456
Net farm income from operations	313,564	269,520	181,863
Gain or loss on capital sales	8,838	11,118	21,550
Average net farm income	322,402	280,638	203,413
Median net farm income	189,658	173,514	153,400
<b>Profitability (cost)</b>			
Rate of return on assets	10.1 %	9.9 %	7.6 %
Rate of return on equity	13.6 %	12.6 %	8.9 %
Operating profit margin	28.4 %	27.3 %	27.0 %
Asset turnover rate	35.7 %	36.1 %	28.0 %
<b>Profitability (market)</b>			
Rate of return on assets	6.2 %	5.7 %	4.3 %
Rate of return on equity	8.5 %	7.5 %	5.0 %
Operating profit margin	24.9 %	22.6 %	24.3 %
Asset turnover rate	25.1 %	25.1 %	17.7 %
<b>Liquidity &amp; Repayment (end of year)</b>			
Current assets	1,023,693	886,226	576,018
Current liabilities	422,580	308,683	287,297
Current ratio	2.42	2.87	2.00
Working capital	601,113	577,543	288,721
Change in working capital	190,371	176,212	92,459
Working capital to gross inc	46.3 %	67.8 %	44.0 %
Term debt coverage ratio	4.34	4.82	3.11
Replacement coverage ratio	2.79	2.73	1.97
Term debt to EBITDA	1.33	1.26	1.35
<b>Solvency (end of year at cost)</b>			
Number of farms	108	66	22
Total assets	3,433,838	2,934,709	2,760,673
Total liabilities	1,102,126	854,175	743,442
Net worth	2,331,712	2,080,533	2,017,231
Net worth change	305,090	253,228	194,165
Farm debt to asset ratio	35 %	31 %	30 %
Total debt to asset ratio	32 %	29 %	27 %
Change in earned net worth %	15 %	14 %	11 %
<b>Solvency (end of year at market)</b>			
Number of farms	108	66	22
Total assets	4,877,687	4,196,286	4,483,933
Total liabilities	1,703,515	1,424,969	1,204,575
Net worth	3,174,172	2,771,317	3,279,357
Total net worth change	293,984	241,635	188,046
Farm debt to asset ratio	38 %	36 %	32 %
Total debt to asset ratio	35 %	34 %	27 %
Change in total net worth %	10 %	10 %	6 %
<b>Nonfarm Information</b>			
Net nonfarm income	51,952	60,733	46,311
Farms reporting living expenses	35	19	11
Total family living expense	62,504	64,789	65,898
Total living, invest, cap. purch	100,287	101,883	112,360
<b>Crop Acres</b>			
Total crop acres	906	1,011	506
Total crop acres owned	237	226	211
Total crop acres cash rented	629	724	281
Total crop acres share rented	40	61	14
Machinery value per crop acre	748	698	984

**Financial Summary**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Debt to Asset Ratio)**

	<u>Avg. Of All Farms</u>	<u>Less than 20%</u>	<u>20% - 40%</u>	<u>40% - 60%</u>	<u>60% - 80%</u>
Number of farms	108	25	43	22	14
<b>Income Statement</b>					
Gross cash farm income	1,099,964	434,197	983,141	1,855,192	1,640,443
Total cash farm expense	931,696	267,214	747,905	1,701,235	1,629,531
Net cash farm income	168,268	166,983	235,236	153,956	10,912
Inventory change	221,729	88,079	177,891	331,602	491,486
Depreciation	-76,433	-50,638	-80,336	-109,169	-70,426
Net farm income from operations	313,564	204,424	332,790	376,389	431,972
Gain or loss on capital sales	8,838	4,809	2,825	26,309	7,277
Average net farm income	322,402	209,232	335,615	402,698	439,249
Median net farm income	189,658	170,922	240,393	155,706	206,930
<b>Profitability (cost)</b>					
Rate of return on assets	10.1 %	8.1 %	9.7 %	11.2 %	12.3 %
Rate of return on equity	13.6 %	8.4 %	11.9 %	19.4 %	24.9 %
Operating profit margin	28.4 %	32.4 %	29.4 %	27.9 %	26.6 %
Asset turnover rate	35.7 %	25.1 %	32.9 %	40.0 %	46.0 %
<b>Profitability (market)</b>					
Rate of return on assets	6.2 %	4.0 %	6.5 %	7.7 %	7.1 %
Rate of return on equity	8.5 %	4.7 %	8.5 %	12.7 %	13.4 %
Operating profit margin	24.9 %	28.1 %	27.6 %	26.0 %	18.0 %
Asset turnover rate	25.1 %	14.1 %	23.4 %	29.5 %	39.3 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	1,023,693	705,546	904,232	1,259,190	1,816,708
Current liabilities	422,580	43,504	281,403	722,515	1,078,081
Current ratio	2.42	16.22	3.21	1.74	1.69
Working capital	601,113	662,042	622,829	536,675	738,626
Change in working capital	190,371	127,766	169,288	230,797	343,007
Working capital to gross inc	46.3 %	127.8 %	54.5 %	25.5 %	34.5 %
Term debt coverage ratio	4.34	12.23	4.93	3.42	3.59
Replacement coverage ratio	2.79	3.36	2.82	2.52	3.13
Term debt to EBITDA	1.33	0.30	1.13	1.87	1.73
<b>Solvency (end of year at cost)</b>					
Number of farms	108	25	43	22	14
Total assets	3,433,838	2,743,675	3,767,096	3,705,629	4,006,398
Total liabilities	1,102,126	138,332	883,826	1,850,794	2,386,519
Net worth	2,331,712	2,605,344	2,883,270	1,854,835	1,619,880
Net worth change	305,090	204,698	337,842	355,505	398,206
Farm debt to asset ratio	35 %	4 %	25 %	52 %	61 %
Total debt to asset ratio	32 %	5 %	23 %	50 %	60 %
Change in earned net worth %	15 %	9 %	13 %	24 %	33 %
<b>Solvency (end of year at market)</b>					
Number of farms	108	25	43	22	14
Total assets	4,877,687	4,869,977	5,238,584	5,018,818	4,641,552
Total liabilities	1,703,515	734,493	1,522,411	2,495,300	2,943,025
Net worth	3,174,172	4,135,484	3,716,173	2,523,518	1,698,527
Total net worth change	293,984	198,010	358,806	356,123	264,643
Farm debt to asset ratio	38 %	17 %	31 %	52 %	65 %
Total debt to asset ratio	35 %	15 %	29 %	50 %	63 %
Change in total net worth %	10 %	5 %	11 %	16 %	18 %
<b>Nonfarm Information</b>					
Net nonfarm income	51,952	52,299	56,868	55,514	33,719
Farms reporting living expenses	35	11	16	6	2
Total family living expense	62,504	54,086	70,229	60,567	-
Total living, invest, cap. purch	100,287	84,820	114,857	90,668	-
<b>Crop Acres</b>					
Total crop acres	906	482	903	1,086	1,568
Total crop acres owned	237	207	314	225	142
Total crop acres cash rented	629	255	515	840	1,413
Total crop acres share rented	40	20	74	21	13
Machinery value per crop acre	748	946	836	786	399



**Financial Summary**  
**Southwest Minnesota Farm Business Management Association**  
**(Farms Sorted By Age of Operator)**

	<u>Avg. Of All Farms</u>	<u>Less Than 31</u>	<u>31 - 40</u>	<u>41 - 50</u>	<u>51 - 60</u>	<u>Over 60</u>
Number of farms	108	9	18	14	15	52
<b>Income Statement</b>						
Gross cash farm income	1,099,964	156,002	768,357	839,649	1,246,888	1,405,833
Total cash farm expense	931,696	149,918	720,104	631,415	1,041,078	1,189,540
Net cash farm income	168,268	6,084	48,254	208,234	205,811	216,292
Inventory change	221,729	31,222	294,403	207,348	209,525	236,937
Depreciation	-76,433	-4,960	-50,575	-66,511	-80,501	-99,252
Net farm income from operations	313,564	32,345	292,082	349,071	334,835	353,978
Gain or loss on capital sales	8,838	22	5,057	-9,802	5,002	17,798
Average net farm income	322,402	32,367	297,139	339,269	339,837	371,775
Median net farm income	189,658	21,174	151,840	248,187	245,070	229,028
<b>Profitability (cost)</b>						
Rate of return on assets	10.1 %	6.9 %	12.5 %	13.6 %	10.2 %	9.1 %
Rate of return on equity	13.6 %	10.8 %	20.3 %	20.3 %	13.7 %	11.5 %
Operating profit margin	28.4 %	13.3 %	25.5 %	32.2 %	30.5 %	28.3 %
Asset turnover rate	35.7 %	52.2 %	49.1 %	42.3 %	33.4 %	32.0 %
<b>Profitability (market)</b>						
Rate of return on assets	6.2 %	3.6 %	8.0 %	9.3 %	5.3 %	5.7 %
Rate of return on equity	8.5 %	3.3 %	13.1 %	14.8 %	7.0 %	7.5 %
Operating profit margin	24.9 %	7.1 %	19.2 %	28.7 %	24.7 %	26.3 %
Asset turnover rate	25.1 %	50.7 %	41.7 %	32.4 %	21.7 %	21.8 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	1,023,693	124,102	947,213	862,631	1,214,993	1,194,046
Current liabilities	422,580	50,836	430,194	279,259	470,565	509,028
Current ratio	2.42	2.44	2.20	3.09	2.58	2.35
Working capital	601,113	73,265	517,018	583,371	744,428	685,018
Change in working capital	190,371	26,587	179,363	197,758	258,711	200,827
Working capital to gross inc	46.3 %	39.3 %	48.9 %	55.9 %	51.6 %	42.9 %
Term debt coverage ratio	4.34	8.51	4.28	4.17	4.26	4.37
Replacement coverage ratio	2.79	7.26	3.28	2.93	2.53	2.68
Term debt to EBITDA	1.33	3.18	1.60	1.43	1.23	1.24
<b>Solvency (end of year at cost)</b>						
Number of farms	108	9	18	14	15	52
Total assets	3,433,838	484,692	2,559,336	3,395,151	3,646,637	4,196,010
Total liabilities	1,102,126	300,161	1,246,511	1,082,518	1,192,072	1,170,281
Net worth	2,331,712	184,531	1,312,825	2,312,633	2,454,565	3,025,729
Net worth change	305,090	48,818	275,391	374,068	306,061	340,874
Farm debt to asset ratio	35 %	57 %	50 %	39 %	36 %	30 %
Total debt to asset ratio	32 %	62 %	49 %	32 %	33 %	28 %
Change in earned net worth %	15 %	36 %	27 %	19 %	14 %	13 %
<b>Solvency (end of year at market)</b>						
Number of farms	108	9	18	14	15	52
Total assets	4,877,687	523,228	2,984,269	4,250,954	5,563,467	6,257,671
Total liabilities	1,703,515	320,519	1,587,995	1,576,533	1,957,704	1,943,731
Net worth	3,174,172	202,709	1,396,274	2,674,421	3,605,763	4,313,940
Total net worth change	293,984	37,414	218,685	358,179	284,563	349,890
Farm debt to asset ratio	38 %	61 %	55 %	45 %	39 %	34 %
Total debt to asset ratio	35 %	61 %	53 %	37 %	35 %	31 %
Change in total net worth %	10 %	23 %	19 %	15 %	9 %	9 %
<b>Nonfarm Information</b>						
Net nonfarm income	51,952	66,090	53,328	54,460	34,627	53,352
Farms reporting living expenses	35	3	3	4	4	21
Total family living expense	62,504	-	-	-	-	67,960
Total living, invest, cap. purch	100,287	-	-	-	-	109,667
<b>Crop Acres</b>						
Total crop acres	906	168	1,273	997	816	909
Total crop acres owned	237	14	106	209	244	327
Total crop acres cash rented	629	154	1,121	755	533	535
Total crop acres share rented	40	-	45	34	39	47
Machinery value per crop acre	748	195	345	592	1,019	936



## **Appendix I**

### **Whole Farm Analysis Procedures and Measures**

The whole-farm reports include summary financial statements and measures for all farms included in this report. Rounding of individual items may have caused minor discrepancies between those items and the printed totals which are calculated before rounding.

#### **Financial Summary**

This table summarizes key measures reported in several of the following tables.

##### ***Income Statement***

This section summarizes key totals from the Income Statement table. *Average Net Farm Income* is the mean or average farm earnings of the group calculated on an accrual adjusted basis. *Median Net Farm Income* is the farm earnings of the median or middle farm in the group. If it is lower than the average, the average earnings are skewed because some farms had much higher earnings than the rest of the group. If it is higher than the average, the average earnings are skewed because some farms had much lower earnings than the rest of the group.

##### ***Profitability***

See the Profitability Measures section below for an explanation of these measures.

##### ***Liquidity and Repayment***

See the Financial Standards Measures and Liquidity Measures sections below for an explanation of these measures.

##### ***Solvency***

This section summarizes key measures from the Balance Sheet reports.

##### ***Non-farm Information***

This section summarizes non-farm earnings for all farms and family living withdrawals for those sole proprietors who kept accurate family living records. More detail is included on the Household and Personal Expenses and Non-Farm Summary pages.

##### ***Crop Acres***

This section summarizes acres used for cropping from the Crop Production and Marketing table.

#### **Financial Standards Measures**

This table contains the Farm Financial Standards Council's 21 financial measures for evaluating a farm's financial position and performance.

## ***Liquidity***

*Current Ratio* is calculated by dividing the total current farm assets by the total current farm liabilities.

*Working Capital* is calculated by subtracting current farm liabilities from current farm assets.

*Working Capital to Gross Income* is *Working Capital* divided by *Gross Revenues (accrual)*.

## ***Solvency***

*Farm Debt to Asset Ratio* is calculated by dividing the total farm liabilities by the total farm assets. It measures the proportion of farm assets financed by debt capital.

*Farm Equity to Asset Ratio* is calculated by dividing farm equity or net worth by the total farm assets. It measures the proportion of the farm assets financed by the owner's equity as opposed to debt. This is the opposite of the debt to asset ratio. These two measures always add up to 100% because they describe how total farm assets are financed.

*Farm Debt to Equity Ratio* measures farm debt relative to farm equity. It is calculated by dividing the total farm liabilities by the total farm net worth. The debt to equity ratio measures the amount of borrowed capital being employed for every dollar of equity capital.

## ***Profitability***

*Rate of Return on Farm Assets* can be thought of as the average interest rate being earned on all investments in the farm or ranch business. If assets are valued at market value, the rate of return on assets can be looked at as the “opportunity cost” of farming versus alternate investments. If assets are valued at cost value, the rate of return on assets more closely represents the actual return on the average dollar invested in the farm. The rate of return on farm assets is calculated as follows:  $\text{Rate of Return on Assets} = \text{Return on Farm Assets} \div \text{Average Farm Investment}$ , where:  $\text{Return on Farm Assets} = \text{Net Farm Income} + \text{Farm Interest} - \text{Value of Operator's Labor \& Management}$ , and  $\text{Average Farm Investment} = (\text{Beginning Total Farm Assets} + \text{Ending Total Farm Assets}) \div 2$ .

*Rate of Return on Farm Equity* represents the interest rate being earned on farm net worth. If assets are valued at market value, this return can be compared to returns available if the assets were liquidated and invested in alternate investments. If assets are valued at cost value, this more closely represents the actual return on the funds that have been invested or retained in the business. The rate of return on farm equity is calculated as follows:  $\text{Rate of Return on Equity} = \text{Return on Farm Equity} \div \text{Average Farm Net Worth}$ , where:  $\text{Return on Farm Equity} = \text{Net Farm Income} - \text{Value of Operator's Labor \& Management}$ , and  $\text{Average Farm Net Worth} = (\text{Beginning Farm Net Worth} + \text{Ending Farm Net Worth}) \div 2$ .

*Operating Profit Margin* is a measure of the operating efficiency of the business. It is calculated as follows:  $\text{Operating Profit Margin} = \text{Return to Farm Assets} \div \text{Value of Farm Production}$ . If expenses are held in line relative to the value of output produced, the farm will have a healthy operating profit margin. A low net profit margin may be caused by low prices, high operating expenses, or inefficient production.

*Net Farm Income* represents the returns to unpaid labor, management, and equity capital invested in the business.

EBITDA is Earnings Before Interest, Taxes, Depreciation and Amortization. It is Net Farm Income from Operations from the income statement plus interest expense and depreciation expense. This measure is common in commercial financial analysis but is not commonly used in agriculture.

### ***Repayment Capacity***

*Capital Debt Repayment Capacity* is *Net Farm Income From Operations* plus *Depreciation, Personal Income*, and *Interest on Term Debt* minus *Family Living/Owner Withdrawals, Payments on Personal Debt* and *Income Taxes Paid*. This represents total earnings available for debt repayment and cash capital replacement.

*Capital Debt Repayment Margin* is *Capital Debt Repayment Capacity* minus *Scheduled Term Debt Payments*. This is the amount by which earnings available for debt repayment exceeded payments due.

*Replacement Margin* is *Capital Debt Repayment Margin* minus *Cash Replacement Allowance*. This is the amount by which earnings available for debt repayment and replacement exceed payments due and cash replacement needs.

*Term Debt Coverage Ratio* measures whether the business generated enough income to cover term debt payments. It is calculated by dividing the funds generated by the business for debt repayment (net cash farm income + non-farm income + interest expense - family living expense - income taxes) by total term debt payments (annual scheduled principal and interest payments on intermediate and long term debt). A ratio less than 1.0 indicates that the business did not generate sufficient cash to meet scheduled payments in the past year. A ratio greater than 1.0 indicates the business generated enough cash to pay all term debt payments.

*Replacement Coverage Ratio* measures whether the business generated enough income to cover scheduled term debt payments plus estimated cash capital replacement needs. A ratio less than 1.0 indicates that the business did not generate sufficient income to meet replacement needs. A ratio greater than 1.0 indicates the business generated enough income to pay all term debt payments and cover an allowance for capital replacement.

### ***Efficiency***

*Asset Turnover Rate* is a measure of efficiency in using capital. It is calculated as follows:

Asset Turnover Rate = Value of Farm Production ÷ Total Farm Assets.

The last four ratios reflect the distribution of gross income to cover operating expenses and generate farm income. The sum of the operating expense ratio, the depreciation expense ratio, and the interest expense ratio equals the percent of gross income used to pay business expenses. The amount remaining is net farm income. The gross farm income used to calculate these ratios is the accrual gross farm income.

*Operating Expense Ratio* is calculated as (Total Farm Operating Expense - Farm Interest Expense) ÷ Gross Farm Income. This ratio indicates the percent of the gross farm income that

was used to pay operating expenses. Total farm operating expense is the accrual total operating expense.

*Depreciation Expense Ratio* is calculated as  $\text{Depreciation} \div \text{Gross Farm Income}$ . This ratio indicates the percent of the gross farm income that was used to cover depreciation and other capital adjustments.

*Interest Expense Ratio* is calculated as  $\text{Farm Interest Expense} \div \text{Gross Farm Income}$ . This ratio indicates the percent of the gross farm income used for farm interest expenses. This is the same ratio as the accrual interest as a percent of income from the Liquidity table.

*Net Farm Income Ratio* is calculated as  $\text{Net Farm Income} \div \text{Gross Farm Income}$ . This ratio indicates the percent of the gross farm income that remained after all expenses.

## **Farm Income Statement**

The Farm Income Statement is a summary of income, expenses, and resultant profit or loss from farming operations during the calendar year. The first section lists cash farm income from all sources. The second section lists *cash* expenses. “Interest” includes only interest actually paid. No opportunity charges on farm equity capital or unpaid labor are included. The difference between *Gross Cash Farm Income* and *Total Cash Expense* is the *Net Cash Farm Income*. This is net farm income on a *cash* basis.

The third and fourth sections deal with noncash changes in the farm business. The *Inventory Changes* and *Depreciation* sections are used to convert the cash income statement (Net Cash Farm Income) derived from the first two sections into an accrual income statement. The resulting “Net Farm Income” represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). In other words, it represents the return to all of the resources which are owned by the farm family and, hence, not purchased or paid a wage. However, it does not include any asset appreciation, debt forgiveness or asset repossessions.

## **Profitability Measures**

Profitability is measured using assets valued first at cost and then at market. The reports include five measures of profit followed by the values used to calculate the measures.

*Net Farm Income* is repeated from the Farm Income Statement report. When assets are valued at market, it includes the change in market valuation of capital for the year.

*Rate of Return on Assets* is the *Return to Farm Assets* divided by *Average Farm Assets*.

*Rate of Return on Equity* is the *Return to Farm Equity* divided by *Average Farm Equity*.

*Operating Profit Margin* is the *Return to Farm Assets* divided by *Value of Farm Production*.

*Asset Turnover Rate* is the *Value of Farm Production* divided by *Average Farm Assets*.

*Farm Interest Expense* is the accrued interest cost so it will be different from the cash interest paid shown in the Farm Income Statement.

*Value of Operator's Labor and Management* is its opportunity cost. It is assigned by farm within suggested guidelines.

*Return on Farm Assets* is calculated by adding *Farm Interest Expense* and *Net Farm Income* and then subtracting the *Value of Operator's Labor and Management*.

*Average Farm Assets* is the average of beginning and ending total farm assets for all farms, not just those included in the Balance Sheet report.

*Return to Farm Equity* is calculated by subtracting the *Value of Operator's Labor and Management* from *Net Farm Income*.

*Average Farm Equity* is the average of beginning and ending farm net worth.

*Value of Farm Production* is gross farm income minus feeder livestock and feed purchased and adjusted for inventory changes in crops, market livestock and breeding livestock.

## **Liquidity and Repayment Capacity Measures**

*Current Ratio* is total *Current Assets* divided by total *Current Liabilities*.

*Working Capital* is total *Current Assets* minus total *Current Liabilities*.

*Working Capital to Gross Income* is *Working Capital* divided by *Gross Revenues (accrual)*.

*Current Assets* are taken from the ending balance sheet and include all assets that will be sold or used up in production within one business year.

*Current Liabilities* are taken from the ending balance sheet and include all loans and other debt due to be repaid within one business year. Principal due within twelve months on intermediate and long-term loans is included.

*Gross Revenues (accrual)* is gross cash farm income from the income statement adjusted for inventory changes in crops and feed, market livestock, accounts receivable, hedging accounts, breeding livestock and other income related inventories.

*Net Farm Income from Operations* is from the Income Statement.

*Depreciation* is the total depreciation from the Income Statement. It is added as a source of repayment because it is a non-cash expense that was subtracted to arrive at *Net Farm Income From Operations*.

*Personal Income* is the average for all farms, not including *Gifts and Inheritances*.

*Family Living/Owner Withdrawals* is the amount of owner withdrawals for family living, partnership withdrawals, and corporate dividends. Reported withdrawals are adjusted to include any discrepancy with actual cash disappearance.

*Payments on personal debt* is the total principal payments made during the year on all non-farm loans.

*Income Taxes Paid* are total federal, state, and social security taxes paid during the year on farm and personal earnings.

*Interest on Term Debt* is the amount of interest paid on intermediate and long-term loans during the year. Interest is added as a source of repayment because it was previously subtracted to arrive at *Net Farm Income from Operations*.

*Capital Debt Repayment Capacity* is *Net Farm Income From Operations* plus *Depreciation, Personal Income*, and *Interest on Term Debt* minus *Family Living/Owner Withdrawals, Payments on Personal Debt* and *Income Taxes Paid*. This represents total earnings available for debt repayment and cash capital replacement.

*Scheduled Term Debt Payments* is the scheduled amount of principal and interest payments due on farm intermediate and long-term loans from the beginning balance sheet.

*Capital Debt Repayment Margin* is *Capital Debt Repayment Capacity* minus *Scheduled Term Debt Payments*. This is the amount by which earnings available for debt repayment exceeded payments due.

*Cash Replacement Allowance* is the estimated amount of cash needed to cover the portion of capital replacement needs that normally come from cash flow. It is estimated for each operator based on their financial structure.

*Replacement Margin* is *Capital Debt Repayment Margin* minus *Cash Replacement Allowance*. This is the amount by which earnings available for debt repayment and replacement exceed payments due and cash replacement needs.

*Term Debt Coverage Ratio* is *Capital Debt Repayment Capacity* divided by *Scheduled Term Debt Payments*. This is how many times scheduled payments are covered by repayment capacity.

*Replacement Coverage Ratio* is *Capital Debt Repayment Capacity* divided by the total of *Scheduled Term Debt Payments* and the *Cash Replacement Allowance*. This represents how many times scheduled payments and cash replacement needs are covered by repayment capacity.

## **Balance Sheets at Cost and Market Values**

These tables include all farm and personal assets and liabilities reported by these farms on their beginning and ending balance sheets. Government crop loans are treated consistently as loans on these tables, meaning that the full asset value is included as an asset and total accrued interest and outstanding principal balances are included as liabilities. Capital assets are valued at original purchase price minus economic depreciation on the Cost Value table. Assets are valued at a conservative market value on the Market Value table. Deferred liabilities are included on the Market Value table. Deferred liabilities are an estimate of the taxes that would be due if the business was liquidated on the date of the balance sheet.



## **Statement of Cash Flows**

This table reports the sources from which cash was available or obtained and where that cash was used or remains at the end of the year.

## **Crop Production and Marketing Summary**

This table contains three sections. The first section reports average acreage by tenure and general use. The next two sections show average price received from cash sales and average yields for major crops.

## **Household and Personal Expenses**

For those farms that kept records, the household and personal expenses are summarized in this table. Since not all farms keep these records, the number of farms may be different for each group. Averages are determined by the number of farms keeping these records.

## **Operator and Labor Information**

This table has four sections. The first reports the averages for the number of operators per farm, the operator's age, and the number of years farming. The second section reports various measures and results per operator compared to per farm in other reports.

The third section reports the amount of labor used and the returns to that labor. *Total Unpaid Labor Hours* and *Total Hired Labor Hours* are based on farmers' estimates of labor use. No labor records are kept for unpaid labor. *Value of Farm Production/Hour* is the Value of Farm Production divided by Total Labor Hours per Farm. *Net Farm Income/Unpaid Hour* is Net Farm Income divided by Total Unpaid Labor Hours.

The fourth section reports the number of partnerships and withdrawals in each grouping.

## **Non-farm Summary**

This table reports the income from non-farm sources which is included in a farmer's total net income. Not all farms have non-farm income, but the figure reported is the average over all farms not just those reporting non-farm income. Also reported are the beginning and ending values for non-farm assets for all farms (not just sole proprietors).



## **Appendix II**

### **Crop Enterprise Analysis Procedures and Measures**

The Crop Enterprise Analysis tables show the profitability of each crop enterprise produced by five or more farms.

*Gross Return* is the average Yield multiplied by the Value Per Unit plus any other production or income related to the crop. Value Per Unit for cash crops is the average sales price for crops sold before the end of the year and the average ending inventory value for crops remaining unsold. For feed crops, it is the estimated harvest-time value. LDP payments and other commodity-specific income are added to estimate the total value received for crop production.

*Direct Expenses* include expenses that are directly related to the production of the specific crop. Most direct expenses are directly assigned to production of the crop and simply divided by acres. Some, such as Fuel and Oil and Repairs, which are difficult to assign directly to specific fields or crops, are determined by allocating the total annual expense across all enterprises using allocation factors entered for each crop.

*Overhead Expenses* are also determined by allocating the total annual expense across all enterprises using allocation factors entered for each crop.

*Net Return per Acre* is the Gross Return per Acre minus Total Direct and Overhead Expenses.

*Net return with government payments* is Net Return per Acre plus Government Payments. Government Payments includes only direct payments and counter-cyclical payments. Payments that are directly attached to production of the crop, such as LDP and disaster payments are included in Gross Return. Because direct government payments have been decoupled from actual production, these payments are generally allocated to all crops excluding vegetables and pasture. This is done for each farm by allocating the direct payments from the whole farm to these crops.

*Net Return over Labor and Management* is calculated by allocating the farmer's charge for unpaid labor and management across all enterprises and subtracting it from Net Return with Government Payments.

*Cost of Production* is calculated by dividing the total expense for each category by the yield per acre. *Total Expense Less Government and Other Income* is total expense minus government payments, income from secondary products, and other income, divided by yield per acre.

*Machinery Cost Per Acre* is the sum of fuel and oil, repairs, custom hire expense, machinery lease payments, machinery depreciation, and interest on intermediate debt divided by acres.

*Estimated Labor Hours Per Acre* is calculated by allocating the farmer's estimate of total operator and hired labor hours for the year across all enterprises.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms have a certain crop enterprise, that information is not reported. If there are fewer than 25 farms, the high and low groups are not reported.

## Appendix III

### Livestock Enterprise Analysis Procedures and Measures

The Livestock Enterprise Analysis tables show the profitability of each livestock enterprise produced by five or more farms.

*Gross Margin* includes product and livestock sales, cull sales, the value of offspring transferred out of the enterprise, the value of inventory change from beginning to end of year, and any other income assigned to the enterprise. Livestock purchases and the value of animals transferred in from other enterprises are subtracted.

*Direct Expenses* include expenses that are directly related to the specific livestock enterprise. Feed and most other direct expenses are directly assigned based on farm records. Some, such as Fuel and Oil and Repairs, which are difficult to assign directly to enterprises, are determined by allocating the total annual expense across all enterprises using allocation factors entered for each farm.

*Overhead Expenses* are also determined by allocating the total annual expense across all enterprises using allocation factors entered for each farm.

*Net Return* is the Gross Return minus Total Direct and Overhead Expenses.

*Net Return over Labor and Management* is calculated by allocating the farmer's charge for unpaid labor and management across all enterprises and subtracting it from Net Return.

*Estimated Labor Hours* is calculated by allocating the farmer's estimate of total operator and hired labor hours for the year across all enterprises.

*Cost of Production* is calculated by dividing the total expense for each category by Total Production. For grow/finish enterprises, the Purchases and Transfers In are included in direct expense. Cull sales, other offspring sales, and any other miscellaneous income are subtracted and replacement purchases and transfers in are added to arrive at the cost *with other revenue adjustments*. *With Labor and Management* is the cost with other revenue adjustments plus the producer's charge for operator's labor and management. This is the breakeven price for the primary product to provide a return for operator labor and management.

The last section of each livestock table contains both economic and technical efficiency measures. *Lbs. feed per lb. of gain* is the pounds of total feed divided by Total production. For grains, these pounds per bushel are used: corn, 56; oats, 32; barley, 48; grain sorghum, 56; wheat, 60; and millet, 48. For these forages, the units are converted to pounds and then adjusted by these factors: alfalfa haylage, 0.5; corn silage, 0.33; oatlage, 0.5; sorghum silage, 0.33; and small grain silage, 0.33.

The calving and weaning percentages are calculated as the number of calves which are calved and weaned, respectively, divided by the number of cows which are supposed to bear young.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms have a certain livestock enterprise, that information is not reported. If there are fewer than 25 farms, the high and low groups are not reported.

## Appendix IV Prices Used in the Analysis Report

Item	Beginning Inventory	Feed	Ending Inventory
All Corn/bu.	\$3.80	\$3.30	\$4.50
Oats/bu.	2.74	2.67	2.90
All Wheat/bu.	5.14	4.90	5.63
Soybeans/bu.	8.90	8.93	12.50
Alfalfa hay/t. (avg quality)	\$150	\$114	\$128
Alfalfa haylage/t	65	49	55
Grass/Mixed hay/t	125	92	92
Corn silage/t.	30	26	36
Oats straw/bale/ton	\$3.75/125	\$3.75/125	\$3.75/125
Cornstalks/t.	30	30	30
Oatlage/t.	24	21	29

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Enterprise production valued at actual selling price if sold or contracted, inventory price for balance.  
All feeds are valued on an as fed moisture basis.

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### Other Prices Used:

Pasture: \$52.00/acre (adjusted for quality and carrying capacity)  
Value of milk fed calves \$ 1.50/gallon

Depreciation is calculated by using a 5% rate for buildings, 10% for machinery, 20% for beef cattle and sheep and 33% for breeding hogs and dairy cows. The economic depreciation is calculated by taking the beginning cost (book) value, plus new purchases (boot), less book value of sold items multiplied by the appropriate percentage rate.

Value of unpaid operator's labor is calculated by using this formula: For sole proprietors and partnerships, labor and management is valued at \$25,000 per operator plus 5% of the value of farm production, with a minimum of \$30,000 for a full-time farm operator. This value is used in calculating ROA, ROE and other whole farm ratios and is also allocated as an opportunity cost to crop and livestock enterprises.







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This material is based upon work supported by USDA/NIFA under Award Number 2020-38504-32480. This is a National Farm Business Management and Benchmarking Grant from the USDA National Institute of Food and Agriculture.



United States Department of Agriculture  
National Institute of Food and Agriculture