

Minnesota and North Dakota  
Farm Business Management Education

# Red River Valley 2019 Report



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Minnesota Farm Business Management Education  
and  
North Dakota Farm Business Management Education

RED RIVER VALLEY AVERAGES  
2019 ANNUAL REPORT

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2019 Red River Valley Report  
Minnesota and North Dakota Farm Business Management Education

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## INTRODUCTION

This report summarizes the individual farm records of farms in the Red River Valley that are enrolled in Farm Management Education programs. The current financial status of farm operators and net returns from each crop enterprise is reported. In addition to the average of all farms, the averages for the high and low net income groups are also presented. To insure anonymity, only averages of five or more farms are reported. Regional averages reports can be used by producers for comparison purposes to identify and study the areas that may need management improvement. A review of the comparative information may reveal how certain aspects of the business or enterprises excel and help answer why they are profitable. The data contained in this report should also be useful to instructors, extension agents, bankers and agricultural consultants.

The Red River Valley averages reports are divided into two major categories. Explanatory notes precede the farm operators' reports and the crop reports.

The 2019 Red River Valley Report is based upon data generated by individual farm analysis completed by farm/ranch families enrolled in the Farm and Ranch Business Management Education programs in Minnesota and North Dakota. The tables in this report were created using FINPACK and RankEm Central copyrighted software of the Center for Farm Financial Management, University of Minnesota.

You may contact Ron Dvergsten, Northland Community and Technical College, Highway 1 East, Thief River Falls, MN 56701, phone: (218) 683-8747, to order a copy of this report. This report and regional reports for north central, south central and western North Dakota can be ordered for \$5 per copy from Farm Business Management, PO Box 6022, Bismarck, ND 58506-6022, phone: (701) 224-8390. A state average book for North Dakota farms is also available. The reports are available online at [www.ndfarmmanagement.com](http://www.ndfarmmanagement.com).

## EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS

The tables include the same number of farms, which were all of the farms whose records were judged to be of sufficient quality to be included in the overall report. However, the balance sheets include only sole proprietors. Partnerships and corporations are excluded because some debt is held outside of the business causing potential misinterpretations of the financial statement. The number of farms included in each of the crop tables varies because all farms do not have the same enterprises. Also, some farmers' records were complete enough to be included in the whole-farm tables, but at times, these same farmers' crop records were not complete enough to include in the respective crop and livestock tables.

Rounding of individual items for the report may have caused minor discrepancies with the printed totals which are calculated before rounding.

### Farm Income Statement

This statement is a summary of income, expenses, or resultant profit or loss from farming operations during the calendar year.

The first section of the income statement is a table which lists cash farm income. There are several sources of cash farm income. Cash sales of crops are listed first followed by cash sales of livestock.

Government payments are categorized. "Crop government payments" are Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC) payments. "LDP payments" are loan deficiency payments that may be received on production when local prices are below the county loan rate for the crop. "Livestock government payments" include dairy MPP payments and other livestock related payments. "CRP payments" are funds received for land enrolled in the Conservation Reserve Program. "Other government payments" refers to all other government payments such as disaster payments, EQIP, CSP, and Market Facilitation Payments (MFP).

Lastly, cash income is categorized by sources such as custom work, cash patronage dividends, crop and property insurance indemnities, sale of resale items, and other.

The second section of the income statement lists cash expenses. "Hired labor" includes only labor which was hired and paid. "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 last two sections of the income statement deal with the non-cash 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 final adjustment is for "Gain or loss on capital sales." The bottom line, labeled "Net farm income," represents the return to the operators and family's unpaid labor, management, and equity capital (net worth). In other words, it represents the return to all of the resources that are owned by the farm family and hence, not purchased or paid a wage. However, it does not include any debt forgiveness or asset repossessions.

### Inventory Changes

This is the detailed statement of inventory changes that is summarized in the income statement. It includes beginning and ending inventories and the calculated changes.

## Depreciation

This is the detailed statement of depreciation and other capital adjustments that is summarized in the income statement. It includes beginning and ending inventories, and capital sales and purchases.

## Profitability Measures

This table shows profitability when capital assets are valued at cost. Various measures of performance are calculated. In the previous tables no opportunity costs are used. In this table, opportunity costs for labor, capital, and management are used. The measures and their components are described below.

**"Rate of return on assets"** is the "Return on farm assets" divided by "Average farm assets."

**"Rate of return on equity"** is the "Return of farm equity" divided by "Average farm equity."

**"Operating profit margin"** is the "Return on 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 accrual interest cost, usually it will be different from the cash interest expense.

**"Value of operator's labor and management"** is an opportunity cost for unpaid operator's labor and management that is used in the calculation of several financial performance measures. A value of \$25,000 per full time operator plus 5% of value of farm production is used.

**"Return of farm assets"** is calculated by adding "Farm interest expense" to "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.

**"Return on 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 cash farm income minus purchased feed and feeder livestock and adjusted for inventory changes in crops, market livestock, accounts receivable and breeding livestock.

## Liquidity & Repayment Capacity Measures

The table shows several measures of liquidity and repayment capacity. Calculation of repayment capacity starts with net farm income from operations and adds back the non-cash expense of depreciation. Personal income is also added. Family living expenses, personal debt payments, income taxes paid, and interest on term debt are subtracted to determine the capital debt repayment capacity.

## Balance Sheets

The ending balance sheet statements and solvency measures are for all farms; in previous Red River Valley reports they were presented for sole proprietors only. Current assets are valued at market price at the time of the inventory which is December 31. In balance sheet at cost values, intermediate and long-term assets that are depreciable are valued at cost remaining (amount remaining to be depreciated, plus salvage value). Raised breeding livestock is valued at conservative market replacement costs. Land is valued at cost or conservative market value. In balance sheet at market values, the intermediate and long term assets are listed at market value, and deferred income tax liabilities are estimated.

## Statement of Cash Flows

This statement organizes cash inflows and outflows by the following three categories: Operating activities, investing activities, and financing activities.

## Financial Standards Measures

The Farm Financial Standards Task Force recommended the use of these financial measures to evaluate a farm's financial position and financial performance. These measures are grouped by: Liquidity, Solvency, Profitability, Repayment Capacity, and Efficiency.

### Liquidity

Liquidity is the ability of the farm business to meet financial obligations in a timely manner, without disrupting normal business operations.

**Current Ratio:** The current ratio shows the value of current assets relative to current liabilities. It measures the extent current farm assets, if liquidated, would cover liabilities that are due during the next 12 months. The higher the ratio, the safer the short term position.

**Working Capital:** Working capital shows the dollar amount that current assets can or cannot cover current liabilities. It approximates the amount of capital available to purchase crop and livestock inputs and equipment necessary to produce farm products. The amount of working capital considered adequate must be related to the size of the farm business.

**Working Capital to Gross Revenues:** Measures operating capital available against the size of the business.

### Solvency

Solvency is important in evaluating the risk position of the farm and family and in considering future borrowing capacity. Solvency measures the ability of the business to pay off all debts if liquidated.

**Farm Debt To Asset Ratio:** The farm debt to asset ratio measures the financial position or solvency of the farm or ranch by comparing the total liabilities to the total assets. It measures the portion of the farm assets that have debt against them. A higher ratio is considered an indicator of greater financial risk.

**Farm Equity To Asset Ratio:** The farm equity to asset ratio measures the farm equity relative to the value of the farm assets. It measures the proportion of the farm assets financed by the owner's equity whereas the debt to asset ratio measured the proportion of farm assets financed by debt.

**Farm Debt To Equity Ratio:** The farm debt to equity ratio measures the amount of farm debt relative to the amount of farm equity. It measures the amount of debt the farm has for every dollar of equity.

### Profitability

Profitability is the measure of the value of goods produced by the business in relation to the cost of resources used in the production. Profitability calculated on a cost basis does not consider changes in market valuation of capital assets such as machinery and breeding livestock.

**Rate of Return on Assets:** Rate of return on assets is, in effect, the interest rate your farm earned in the past year on all money invested in the business. If assets are valued at market value, the rate of return on investment can be looked at as the "opportunity cost" of investing money in the farm instead of alternative investments. If assets are valued at cost (cost less depreciation), the rate of return represents the actual return on the average dollar invested in the business.

**Rate of Return on Equity:** Rate of return on equity is, in effect, the interest rate your investment in the business earned in the past year. If assets are valued at market value, this return can be compared with returns available if the assets were liquidated and invested in alternative investments. If assets are valued at cost, this represents the actual return to the amount of equity capital you have invested in the farm business.



If your return on assets is higher than your average interest rate, your return on equity will be still higher, reflecting the fact that there are residual returns to equity capital after paying all interest expense. This is positive use of financial leverage. If your return on assets is lower than your average interest rate, your return on equity will be still lower, reflecting the fact that borrowed capital did not earn enough to pay its interest cost. This is negative financial leverage. Profitability becomes a key concern when substantial debt capital is used in the business.

**Operating Profit Margin:** The operating profit margin is a measure of the profit margin from the employment of assets. It measures how effectively you are employing assets relative to the value of output produced. Low prices, high operating expenses, or production problems are all possible causes of a low operating profit margin.

**Net Farm Income:** Net farm income represents the returns to labor, management, and equity capital invested in the business. Without income from other sources, or appreciation of capital asset values, net farm income must cover family living expenses and taxes, or net worth will decrease.

**EBITDA:** This factor stands for: Earnings Before Interest, Taxes, Depreciation and Amortization. This represents a measure of earnings available for debt repayment.

### **Repayment Capacity**

Repayment capacity shows the borrower's ability to repay term debts (longer than one year) on time. This includes non-farm income, and is therefore not a measure of business performance alone.

**Capital Debt Repayment Capacity:** Measures the amount generated from farm and non-farm sources, to cover debt repayment and capital replacement.

**Capital Debt Repayment Margin:** The amount of money remaining after all operating expenses, taxes, family living costs, and scheduled debt payments have been made. It is the money left, after paying all expenses, which is available for purchasing/financing new machinery, equipment, land or livestock.

**Replacement Margin:** The replacement margin is the amount of income remaining after paying principal and interest on term loans and unfunded (cash) capital purchases.

**Term Debt Coverage Ratio:** The term debt coverage ratio measures the ability of the business to cover all term debt payments. A number less than 100 percent indicates that the business, plus non-farm income, is not generating sufficient cash to meet all of the debt payments, after family living expenses and taxes have been paid. A number greater than 100 indicates the business is generating sufficient cash to pay all term debt obligations with some surplus margin remaining.

**Replacement Margin Coverage Ratio:** This represents the ability to term debt and unfunded capital purchases. A ratio under 1.0 indicated that you did not generate enough income to cover term debt payments and unfunded capital purchases.

### **Efficiency**

These measures reflect the relationships between expense and income items to revenue and the efficiency of the farm business with regard to the use of cash and capital assets.

**Asset Turnover:** Asset turnover is a measure of how efficiently assets are used in the business. A farm with good operating profit margin and asset turnover will show a strong rate of return on farm assets. If operating profit margin is low, the asset turnover rate must be strong, or vice versa, to maintain the rate of return on assets.

**Operating Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to pay the operating expenses. Operating expenses do not include interest or depreciation expense.

**Depreciation Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to cover the depreciation expense.

**Interest Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to pay farm interest expenses.

**Net Farm Income Ratio:** The ratio indicates the percent of the gross farm income, which remains after all expenses.

## **Crop Production and Marketing Summary**

This table contains three sections. The first section reports averages for total acres owned, crop land by tenure and total pasture acres. The next two sections show average price received and average yields for major crops. These tables are sorted on the basis of "Net farm income."

## **Operator and Labor Information**

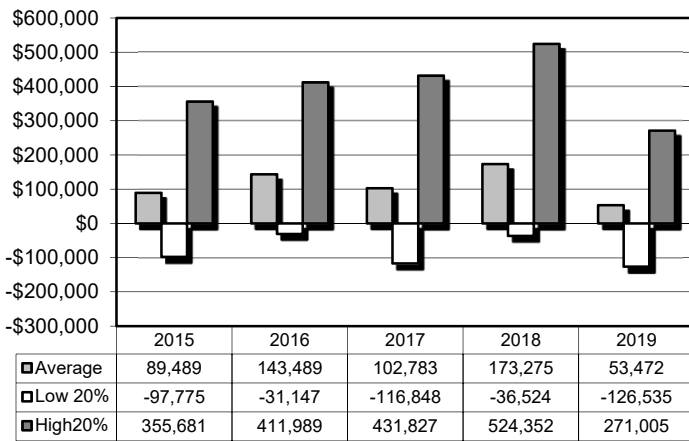
This table reports the average for the number of operators per farm, the operator's age, and the number of years farming.

## **Nonfarm Summary**

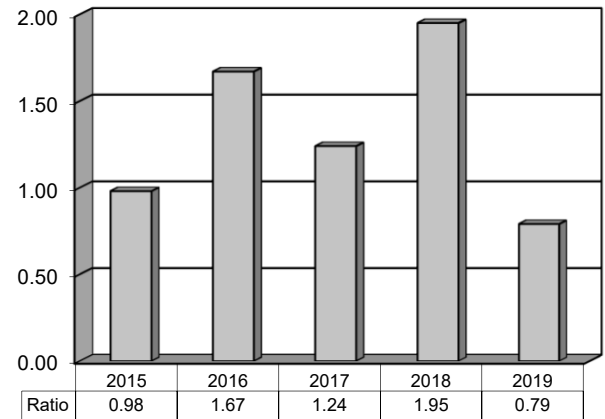
This table also reports nonfarm income. The figure reported is the average over all farms not just those reporting nonfarm income.

## Five Year Trend of Financial Measures Red River Valley Farm Business Management Education

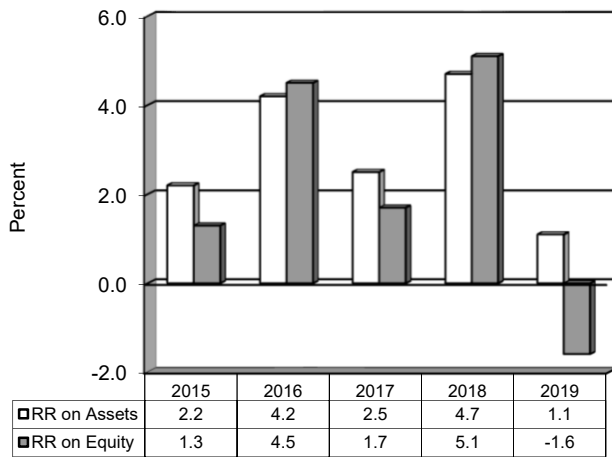
Net Farm Income



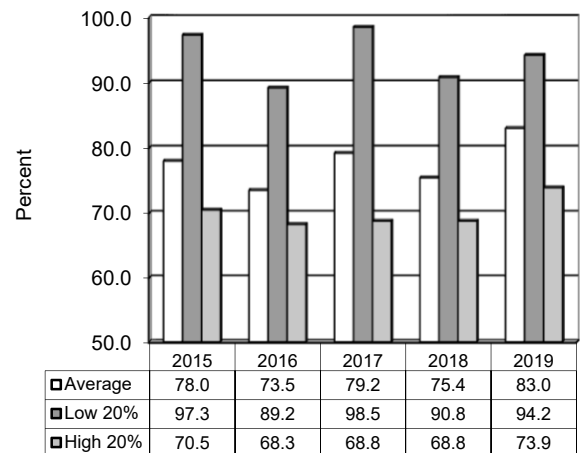
Term Debt Coverage Ratio (accrual)



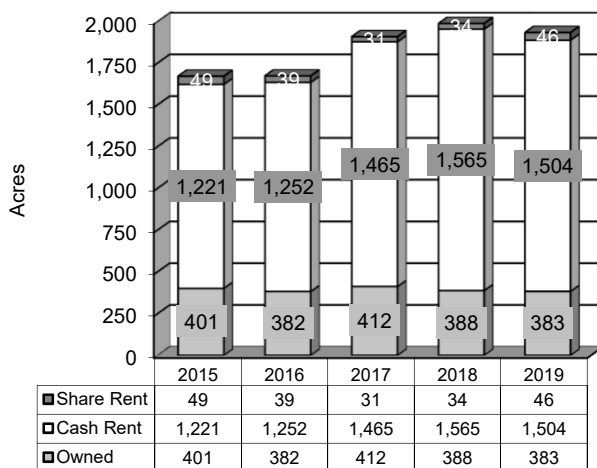
Rate of Return (cost)



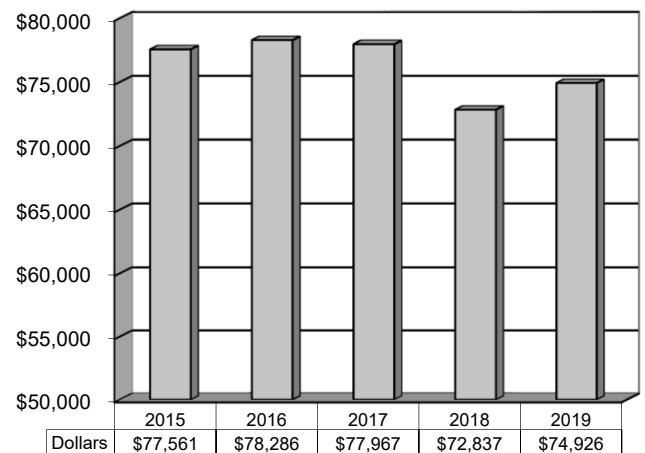
Operating Expense Ratio



Crop Acres



Apparent Family Living



**Farm Income Statement**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
<b>Cash Farm Income</b>				
Barley	6,746	3,692	4,962	14,787
Beans, Black Turtle	2,458	9,298	-	2,992
Beans, Navy	4,521	7,543	-	3,184
Beans, Pink	1,713	8,563	-	-
Beans, Pinto	4,242	8,333	-	10,653
Canola	788	3,938	-	-
Corn	253,315	210,992	116,265	421,347
Corn Silage	2,248	-	-	11,239
Hay, Alfalfa	1,724	3,578	-	805
Peas, Field	768	-	1,331	780
Potatoes	17,783	-	-	78,861
Rye	356	1,697	-	-
Soybeans	217,287	289,937	123,515	293,253
Soybeans Seed	26,106	41,548	1,114	55,569
Sugar Beets	126,862	354,105	34,047	112,526
Sunflowers	5,315	8,448	660	10,867
Wheat, Spring	109,331	229,877	39,995	118,511
Soybeans, Natto	1,406	-	1,864	3,252
Hay	2,429	8,855	53	3,236
Other Crops	932	2,431	419	104
Miscellaneous crop income	7,448	4,004	-	30,829
Beef Cow-Calf, Beef Calves	2,466	11,505	825	-
Beef Finishing	3,760	18,640	159	-
Beef Finish Yearlings Dairy	1,015	-	5,077	-
Finishing	1,363	-	519	-
Hogs, Weaning to Finish	7,584	-	2,065	35,853
Misc. livestock income	34	-	77	-
Crop government payments	3,538	3,170	526	4,736
CRP payments	1,190	784	1,102	2,552
Other government payments	81,391	104,861	39,475	109,110
Conservation govt payment	2,648	102	1,173	5,707
Custom work income	13,041	13,366	3,590	11,965
Patronage dividends, cash	10,998	19,551	5,542	13,377
Crop insurance income	63,904	113,427	28,173	83,689
Property insurance income	3,526	7,254	1,093	5,472
Sale of resale items	2,104	10,522	-	-
Other farm income	34,615	59,810	21,014	50,142
Gross Cash Farm Income	1,026,955	1,559,834	434,636	1,495,399

**Farm Income Statement (continued)**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
<b>Cash Farm Expense</b>				
Seed and plants	125,065	198,223	52,657	167,043
Fertilizer	109,229	132,394	51,665	170,135
Crop chemicals	72,236	124,728	26,896	104,182
Non-chemical crop protect	37	185	-	-
Crop insurance	30,284	44,486	13,955	41,692
Drying expense	8,609	8,420	3,136	13,610
Storage	1,438	1,273	628	1,915
Irrigation energy	482	-	23	2,385
Crop miscellaneous	5,394	10,882	398	9,107
Consultants	4,053	5,575	1,464	3,584
Feeder livestock purchase	4,666	4,228	6,826	9,581
Purchased feed	2,108	1,632	1,036	7,453
Veterinary	598	715	104	1,917
Supplies	91	173	228	-
Livestock leases	338	1,690	-	-
Grazing fees	83	-	415	-
Interest	52,427	84,740	23,546	66,720
Fuel & oil	41,868	65,471	17,081	60,581
Repairs	76,717	123,603	31,597	104,975
Custom hire	13,956	20,565	5,781	12,710
Hired labor	49,661	87,712	9,808	81,822
Land rent	191,623	289,637	74,355	256,383
Stock/quota lease	6,441	16,171	2,622	4,979
Machinery leases	16,550	21,702	6,094	24,684
Building leases	3,630	8,670	562	2,652
Real estate taxes	11,170	16,941	5,339	16,448
Farm insurance	16,246	29,090	7,028	18,788
Utilities	11,334	17,786	4,899	16,097
Hauling and trucking	2,004	1,689	256	4,940
Marketing	4,179	14,386	1,499	1,421
Dues & professional fees	8,169	15,054	3,859	11,014
Purchase of resale items	5,797	4,782	1,778	19,805
Miscellaneous	12,202	20,666	3,605	15,704
Total cash expense	888,682	1,373,267	359,141	1,252,328
Net cash farm income	138,272	186,567	75,495	243,071
<b>Inventory Changes</b>				
Prepays and supplies	-22,484	-50,840	-8,801	-32,366
Accounts receivable	43,267	105,639	7,452	77,218
Hedging accounts	1,954	-469	-119	7,070
Other current assets	13,023	19,755	-425	545
Crops and feed	-29,008	-201,161	-6,044	86,568
Market livestock	-548	-7,656	4,358	254
Breeding livestock	287	409	180	64
Other assets	2,316	5,739	1,150	4,289
Accounts payable	-21,451	-57,257	-9,862	-17,591
Accrued interest	-5,905	-9,718	-1,405	-7,705
Total inventory change	-18,550	-195,559	-13,516	118,346
Net operating profit	119,722	-8,992	61,979	361,417
<b>Depreciation</b>				
Machinery and equipment	-55,849	-99,693	-23,577	-73,105
Titled vehicles	-5,161	-5,701	-4,605	-6,945
Buildings and improvements	-8,221	-16,560	-2,683	-15,291
Total depreciation	-69,231	-121,954	-30,864	-95,340
Net farm income from operations	50,492	-130,946	31,115	266,077
Gain or loss on capital sales	2,980	4,411	1,038	4,928
Net farm income	53,472	-126,535	32,153	271,005

**Inventory Changes**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
Net cash farm income	138,272	186,567	75,495	243,071
<b>Crops and Feed</b>				
Ending inventory	558,943	743,551	250,716	867,580
Beginning inventory	587,951	944,713	256,760	781,012
Inventory change	-29,008	-201,161	-6,044	86,568
<b>Market Livestock</b>				
Ending inventory	9,840	17,002	11,890	12,548
Beginning inventory	10,389	24,658	7,532	12,295
Inventory change	-548	-7,656	4,358	254
<b>Accts Receivable</b>				
Ending inventory	118,812	228,856	32,338	175,387
Beginning inventory	75,546	123,217	24,886	98,169
Inventory change	43,267	105,639	7,452	77,218
<b>Prepaid Expenses and Supplies</b>				
Ending inventory	67,802	112,219	30,662	101,282
Beginning inventory	90,286	163,059	39,463	133,648
Inventory change	-22,484	-50,840	-8,801	-32,366
<b>Hedging Activities</b>				
Ending inventory	8,962	8,158	3,530	17,121
Withdrawals	6,380	6,741	1,500	10,672
Beginning inventory	7,225	8,826	3,360	15,417
Deposits	6,164	6,542	1,788	5,307
Gain or loss	1,954	-469	-119	7,070
<b>Other Current Assets</b>				
Ending inventory	26,737	84,310	281	1,541
Beginning inventory	13,714	64,555	706	996
Inventory change	13,023	19,755	-425	545
<b>Breeding Livestock</b>				
Ending inventory	5,359	21,114	2,859	286
Capital sales	160	802	-	-
Beginning inventory	4,771	19,762	2,393	-
Capital purchases	462	1,746	286	223
Depreciation, capital adjust	287	409	180	64
<b>Other Capital Assets</b>				
Ending inventory	325,263	640,772	103,710	415,966
Capital sales	5,127	20,631	-	1,749
Beginning inventory	313,062	638,069	98,223	400,909
Capital purchases	15,013	17,595	4,338	12,516
Depreciation, capital adjust	2,316	5,739	1,150	4,289
<b>Accounts Payable</b>				
Beginning inventory	39,707	63,823	9,386	50,601
Ending inventory	61,158	121,080	19,248	68,192
Inventory change	-21,451	-57,257	-9,862	-17,591
<b>Accrued Interest</b>				
Beginning inventory	22,913	30,649	11,115	31,845
Ending inventory	28,818	40,367	12,519	39,550
Inventory change	-5,905	-9,718	-1,405	-7,705
Total inventory change	-18,550	-195,559	-13,516	118,346
Net operating profit	119,722	-8,992	61,979	361,417

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**Depreciation**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
Net operating profit	119,722	-8,992	61,979	361,417
<b>Machinery and Equipment</b>				
Ending inventory	640,141	1,038,270	282,926	857,315
Capital sales	13,842	22,017	5,260	17,831
Beginning inventory	622,733	1,030,965	271,207	794,408
Capital purchases	87,098	129,015	40,556	153,842
Depreciation, capital adjust.	-55,849	-99,693	-23,577	-73,105
<b>Titled Vehicles</b>				
Ending inventory	49,335	68,721	32,872	61,017
Capital sales	1,099	381	-14	1,034
Beginning inventory	46,469	66,959	31,683	55,672
Capital purchases	9,126	7,844	5,779	13,323
Depreciation, capital adjust.	-5,161	-5,701	-4,605	-6,945
<b>Buildings and Improvements</b>				
Ending inventory	267,038	437,814	125,059	413,188
Capital sales	2,992	2,163	3,298	1,460
Beginning inventory	255,506	429,885	119,855	393,145
Capital purchases	22,745	26,652	11,185	36,793
Depreciation, capital adjust.	-8,221	-16,560	-2,683	-15,291
Total depreciation, capital adj.	-69,231	-121,954	-30,864	-95,340
Net farm income from operations	50,492	-130,946	31,115	266,077
Gain or loss on capital sales	2,980	4,411	1,038	4,928
Net farm income	53,472	-126,535	32,153	271,005

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**Profitability Measures**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
<b>Profitability (assets valued at cost)</b>				
Net farm income from operations	50,492	-130,946	31,115	266,077
Rate of return on assets	1.1 %	-3.4 %	1.0 %	5.9 %
Rate of return on equity	-1.6 %	-10.4 %	-1.2 %	7.0 %
Operating profit margin	3.2 %	-10.5 %	3.4 %	14.3 %
Asset turnover rate	35.0 %	32.3 %	29.8 %	41.2 %
Farm interest expense	58,331	94,458	24,951	74,425
Value of operator lbr and mgmt.	75,941	117,730	41,382	106,036
Return on farm assets	32,882	-154,218	14,684	234,465
Average farm assets	2,964,077	4,561,173	1,450,062	3,968,855
Return on farm equity	-25,449	-248,676	-10,267	160,040
Average farm equity	1,625,297	2,401,479	860,119	2,270,861
Value of farm production	1,036,890	1,471,437	431,633	1,634,208



**Liquidity & Repayment Capacity Measures**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
<b>Liquidity</b>				
Current ratio	1.39	1.28	1.55	1.54
Working capital	241,564	291,195	132,320	440,402
Working capital to gross inc	23.0 %	19.6 %	30.0 %	26.4 %
Current assets	861,260	1,332,251	372,973	1,259,255
Current liabilities	619,695	1,041,056	240,653	818,853
Gross revenues (accrual)	1,049,461	1,482,079	441,273	1,671,047
<b>Repayment capacity</b>				
Net farm income from operations	50,492	-130,946	31,115	266,077
Depreciation	69,231	121,954	30,864	95,340
Personal income	26,390	12,888	29,241	12,480
Family living/owner withdrawals	-74,926	-100,819	-55,747	-84,677
Cash discrepancy	88	-29	-76	-119
Payments on personal debt	-5,634	-6,956	-5,118	-5,442
Income taxes paid	-15,763	-21,007	-13,206	-23,393
Interest on term debt	34,485	52,002	16,496	44,641
Capital debt repayment capacity	84,362	-72,913	33,570	304,906
Scheduled term debt payments	-106,303	-163,233	-50,245	-143,282
Capital debt repayment margin	-21,941	-236,146	-16,676	161,624
Cash replacement allowance	-46,685	-70,015	-20,875	-60,163
Replacement margin	-68,626	-306,161	-37,551	101,461
Term debt coverage ratio	0.79	-0.45	0.67	2.13
Replacement coverage ratio	0.55	-0.31	0.47	1.50

**Balance Sheet at Cost Values**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
<b>Assets</b>				
Current Farm Assets				
Cash and checking balance	70,163	138,155	43,557	83,795
Prepaid expenses & supplies	67,802	112,219	30,662	101,282
Growing crops	8,844	230	-	359
Accounts receivable	118,812	228,856	32,338	175,387
Hedging accounts	8,962	8,158	3,530	17,121
Crops held for sale or feed	558,943	743,551	250,716	867,580
Market livestock held for sale	9,840	17,002	11,890	12,548
Other current assets	17,893	84,080	281	1,182
Total current farm assets	861,260	1,332,251	372,973	1,259,255
Intermediate Farm Assets				
Breeding livestock	5,359	21,114	2,859	286
Machinery and equipment	640,141	1,038,270	282,926	857,315
Titled vehicles	49,335	68,721	32,872	61,017
Other intermediate assets	229,820	436,221	74,884	306,139
Total intermediate farm assets	924,656	1,564,326	393,541	1,224,757
Long Term Farm Assets				
Farm land	859,592	940,728	588,317	1,125,168
Buildings and improvements	267,038	437,814	125,059	413,188
Other long-term assets	95,443	204,551	28,826	109,827
Total long-term farm assets	1,222,073	1,583,093	742,203	1,648,184
Total Farm Assets	3,007,988	4,479,671	1,508,717	4,132,195
Total Nonfarm Assets	348,638	405,609	294,418	386,521
Total Assets	3,356,626	4,885,280	1,803,136	4,518,716
<b>Liabilities</b>				
Current Farm Liabilities				
Accrued interest	28,818	40,367	12,519	39,550
Accounts payable	61,158	121,080	19,248	68,192
Current notes	455,363	769,835	170,752	606,893
Principal due on term debt	74,357	109,775	38,134	104,217
Total current farm liabilities	619,695	1,041,056	240,653	818,853
Total intermediate farm liabs	193,650	297,548	94,174	270,159
Total long term farm liabilities	575,904	859,240	297,326	685,147
Total farm liabilities	1,389,249	2,197,845	632,154	1,774,159
Total nonfarm liabilities	91,482	132,253	70,302	93,152
Total liabilities	1,480,731	2,330,099	702,456	1,867,311
Net worth (farm and nonfarm)	1,875,895	2,555,181	1,100,679	2,651,405
Net worth change	5,096	-239,992	42,619	193,740
Percent net worth change	0 %	-9 %	4 %	8 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	72 %	78 %	65 %	65 %
Intermediate farm liab. / assets	21 %	19 %	24 %	22 %
Long term farm liab. / assets	47 %	54 %	40 %	42 %
Total debt to asset ratio	44 %	48 %	39 %	41 %

**Balance Sheet at Market Values**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
<b>Assets</b>				
Current Farm Assets				
Cash and checking balance	70,163	138,155	43,557	83,795
Prepaid expenses & supplies	67,802	112,219	30,662	101,282
Growing crops	8,844	230	-	359
Accounts receivable	118,812	228,856	32,338	175,387
Hedging accounts	8,962	8,158	3,530	17,121
Crops held for sale or feed	558,943	743,551	250,716	867,580
Market livestock held for sale	9,840	17,002	11,890	12,548
Other current assets	17,893	84,080	281	1,182
Total current farm assets	861,260	1,332,251	372,973	1,259,255
Intermediate Farm Assets				
Breeding livestock	5,505	21,419	3,409	286
Machinery and equipment	823,846	1,288,201	362,595	1,087,508
Titled vehicles	61,881	85,625	37,891	75,888
Other intermediate assets	303,185	696,020	96,051	329,840
Total intermediate farm assets	1,194,418	2,091,265	499,946	1,493,522
Long Term Farm Assets				
Farm land	1,435,556	1,587,248	795,542	1,749,450
Buildings and improvements	310,167	474,151	132,829	489,901
Other long-term assets	112,685	222,486	38,432	137,648
Total long-term farm assets	1,858,409	2,283,886	966,803	2,376,999
Total Farm Assets	3,914,087	5,707,402	1,839,722	5,129,776
Total Nonfarm Assets	452,759	491,265	512,101	459,855
Total Assets	4,366,846	6,198,668	2,351,824	5,589,632
<b>Liabilities</b>				
Current Farm Liabilities				
Accrued interest	28,818	40,367	12,519	39,550
Accounts payable	61,158	121,080	19,248	68,192
Current notes	455,363	769,835	170,752	606,893
Principal due on term debt	74,357	109,775	38,134	104,217
Total current farm liabilities	619,695	1,041,056	240,653	818,853
Total intermediate farm liabs	193,650	297,548	94,174	270,159
Total long term farm liabilities	575,904	859,240	297,326	685,147
Total farm liabilities	1,389,249	2,197,845	632,154	1,774,159
Total nonfarm liabilities	91,482	132,253	70,302	93,152
Total liabs excluding deferreds	1,480,731	2,330,099	702,456	1,867,311
Total deferred liabilities	313,789	590,583	115,501	353,881
Total liabilities	1,794,520	2,920,682	817,957	2,221,193
Retained earnings	1,875,895	2,555,181	1,100,679	2,651,405
Market valuation equity	696,430	722,805	433,187	717,034
Net worth (farm and nonfarm)	2,572,325	3,277,986	1,533,867	3,368,439
Net worth excluding deferreds	2,886,115	3,868,569	1,649,367	3,722,320
Net worth change	50,868	-153,725	83,964	198,090
Percent net worth change	2 %	-4 %	6 %	6 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	72 %	78 %	65 %	65 %
Intermediate farm liab. / assets	16 %	14 %	19 %	18 %
Long term farm liab. / assets	31 %	38 %	31 %	29 %
Total debt to asset ratio	41 %	47 %	35 %	40 %
Debt to assets excl deferreds	34 %	38 %	30 %	33 %

**Statement Of Cash Flows**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
Beginning cash (farm & nonfarm)	93,128	160,693	50,286	87,138
<b>Cash Provided By Operating Activities</b>				
Gross cash farm income	1,026,955	1,559,834	434,636	1,495,399
Total cash farm expense	-888,682	-1,373,267	-359,141	-1,252,328
Net cash from hedging transactions	216	199	-289	5,365
Cash provided by operating	138,488	186,766	75,207	248,436
<b>Cash Provided By Investing Activities</b>				
Sale of breeding livestock	160	802	-	-
Sale of machinery & equipment	14,284	20,504	5,207	22,340
Sale of titled vehicles	1,319	381	1,077	1,236
Sale of farm land	17,193	51,559	-	23
Sale of farm buildings	3,035	2,163	3,298	1,676
Sale of other farm assets	5,585	20,545	-	1,749
Sale of nonfarm assets	2,633	6,372	68	1,477
Purchase of breeding livestock	-462	-1,746	-286	-223
Purchase of machinery & equip.	-87,098	-129,015	-40,556	-153,842
Purchase of titled vehicles	-9,126	-7,844	-5,779	-13,323
Purchase of farm land	-60,716	-9,469	-95,694	-84,409
Purchase of farm buildings	-22,745	-26,652	-11,185	-36,793
Purchase of other farm assets	-15,013	-17,595	-4,338	-12,516
Purchase of nonfarm assets	-19,067	-19,596	-12,415	-14,986
Cash provided by investing	-170,018	-109,590	-160,602	-287,591
<b>Cash Provided By Financing Activities</b>				
Money borrowed	550,254	810,848	217,973	716,171
Principal payments	-470,991	-777,801	-146,421	-588,899
Personal income	26,390	12,888	29,241	12,480
Family living/owner withdrawals	-74,926	-100,819	-55,747	-84,677
Income and social security tax	-16,850	-17,288	-13,275	-22,164
Capital contributions	550	-	-	-
Capital distributions	-3,689	-13,662	-455	-2,568
Dividends paid	-	-	-	-
Cash gifts and inheritances	16,078	3,686	53,438	17,282
Gifts given	-1,854	-1,374	-466	-3,449
Other cash flows	-	-	-	-
Cash provided by financing	24,960	-83,521	84,289	44,175
Net change in cash balance	-6,569	-6,345	-1,107	5,020
Ending cash (farm & nonfarm)	86,647	154,319	49,103	92,039
Discrepancy	-88	29	76	119

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**Financial Standards Measures**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
<b>Liquidity</b>				
Current ratio	1.39	1.28	1.55	1.54
Working capital	241,564	291,195	132,320	440,402
Working capital to gross inc	23.0 %	19.6 %	30.0 %	26.4 %
<b>Solvency (cost)</b>				
Farm debt to asset ratio	46 %	49 %	42 %	43 %
Farm equity to asset ratio	54 %	51 %	58 %	57 %
Farm debt to equity ratio	0.86	0.96	0.72	0.75
<b>Profitability (cost)</b>				
Rate of return on farm assets	1.1 %	-3.4 %	1.0 %	5.9 %
Rate of return on farm equity	-1.6 %	-10.4 %	-1.2 %	7.0 %
Operating profit margin	3.2 %	-10.5 %	3.4 %	14.3 %
Net farm income	53,472	-126,535	32,153	271,005
EBITDA	178,054	85,466	86,930	435,842
<b>Repayment Capacity</b>				
Capital debt repayment capacity	84,362	-72,913	33,570	304,906
Capital debt repayment margin	-21,941	-236,146	-16,676	161,624
Replacement margin	-68,626	-306,161	-37,551	101,461
Term debt coverage ratio	0.79	-0.45	0.67	2.13
Replacement coverage ratio	0.55	-0.31	0.47	1.50
<b>Efficiency</b>				
Asset turnover rate (cost)	35.0 %	32.3 %	29.8 %	41.2 %
Operating expense ratio	83.0 %	94.2 %	80.3 %	73.9 %
Depreciation expense ratio	6.6 %	8.2 %	7.0 %	5.7 %
Interest expense ratio	5.6 %	6.4 %	5.7 %	4.5 %
Net farm income ratio	4.8 %	-8.8 %	7.1 %	15.9 %

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**Crop Production and Marketing Summary**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
<b>Acreage Summary</b>				
Total acres owned	446	501	293	660
Total crop acres	1,933	3,068	907	2,624
Crop acres owned	383	469	244	559
Crop acres cash rented	1,504	2,516	609	2,009
Crop acres share rented	46	83	54	56
Total pasture acres	1	4	-	-
Percent crop acres owned	20 %	15 %	27 %	21 %
Mach invest/crop acre cost	345	346	341	337
Mach invest/crop acre market	442	427	430	430
<b>Average Price Received (Cash Sales Only)</b>				
Soybeans per bushel	8.18	8.21	8.01	8.22
Wheat, Spring per bushel	5.24	5.21	4.90	5.35
Corn per bushel	3.39	3.30	3.63	3.50
Soybeans Seed per bushel	9.51	10.13	-	-
Barley per bushel	4.53	-	-	-
Beans, Navy per cwt	21.09	-	-	-
Sunflowers per cwt	18.34	-	-	-
Beans, Pinto per cwt	23.41	-	-	-
Soybeans, Food per bushel	12.75	-	-	-
<b>Average Yield Per Acre</b>				
Soybeans (bushel)	38.71	37.84	37.82	40.13
Corn (bushel)	166.09	160.29	166.10	170.49
Wheat, Spring (bushel)	60.79	63.62	60.13	57.33
Sugar Beets (ton)	18.92	17.93	24.31	18.53
Soybeans Seed (bushel)	40.33	38.30	36.64	42.31
Soybeans, Food (bushel)	35.34	41.67	-	-
Barley (bushel)	79.51	-	-	-
Beans, Black Turtle (cwt)	20.33	21.31	-	18.09
Sunflowers (cwt)	20.82	-	-	16.01
Beans, Navy (cwt)	17.72	-	-	-
Hay, Alfalfa (ton)	2.87	-	-	-

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**Operator and Labor Information**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
<b>Operator Information</b>				
Average number of operators	1.1	1.3	1.0	1.2
Average age of operators	47.2	49.4	45.0	49.3
Average number of years farming	23.5	26.1	21.2	26.3
<b>Results Per Operator</b>				
Working capital	216,782	224,782	137,151	358,846
Total assets (cost)	3,012,269	3,771,093	1,868,974	3,681,917
Total liabilities	1,328,822	1,798,673	728,105	1,521,513
Net worth (cost)	1,683,447	1,972,420	1,140,869	2,160,404
Gross farm income	941,797	1,144,061	457,385	1,361,594
Total farm expense	896,485	1,245,142	425,134	1,144,790
Net farm income from operations	45,312	-101,081	32,251	216,803
Net nonfarm income	23,682	9,949	30,309	10,169
Family living & tax withdrawals	81,306	94,063	71,549	88,154
Total acres owned	399.9	386.6	303.5	537.6
Total crop acres	1,735.1	2,368.0	939.9	2,138.3
Crop acres owned	343.9	362.1	253.0	455.8
Crop acres cash rented	1,350.1	1,941.8	630.8	1,637.0
Crop acres share rented	41.1	64.1	56.2	45.5
Total pasture acres	0.7	3.2	-	-
<b>Labor Analysis</b>				
Number of farms	220	44	44	44
Total unpaid labor hours	1,927	2,077	1,428	2,248
Total hired labor hours	2,079	3,675	348	3,821
Total labor hours per farm	4,006	5,752	1,776	6,069
Unpaid hours per operator	1,729	1,604	1,481	1,832

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**Nonfarm Summary**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	220	44	44	44
<b>Nonfarm Income</b>				
Personal wages & salary	18,513	6,556	25,176	9,337
Net nonfarm business income	1,688	-	392	-140
Personal rental income	73	241	-	-
Personal interest income	214	13	80	191
Personal cash dividends	36	42	-	96
Tax refunds	879	1,274	829	127
Other nonfarm income	4,987	4,762	2,765	2,869
Total nonfarm income	26,390	12,888	29,241	12,480
Gifts and inheritances	16,078	3,686	53,438	17,282



**Financial Summary**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(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	220	6	25	44	66	56	23
<b>Income Statement</b>							
Gross cash farm income	1,026,955	57,731	183,463	384,677	737,141	1,430,219	3,275,119
Total cash farm expense	888,682	72,276	170,918	344,225	639,181	1,205,128	2,868,889
Net cash farm income	138,272	-14,545	12,545	40,452	97,959	225,091	406,229
Inventory change	-18,550	41,745	40,316	9,584	14,668	-82,378	-91,996
Depreciation	-69,231	-1,393	-8,582	-25,322	-51,639	-109,148	-190,137
Net farm income from operations	50,492	25,806	44,280	24,713	60,988	33,564	124,096
Gain or loss on capital sales	2,980	-	-	4,093	3,601	3,109	2,770
Average net farm income	53,472	25,806	44,280	28,805	64,589	36,673	126,867
Median net farm income	32,530	21,861	32,939	27,742	40,263	32,530	90,905
<b>Profitability (cost)</b>							
Rate of return on assets	1.1 %	6.4 %	4.8 %	0.8 %	1.8 %	0.1 %	1.6 %
Rate of return on equity	-1.6 %	11.4 %	6.0 %	-1.7 %	-0.2 %	-2.9 %	-1.2 %
Operating profit margin	3.2 %	15.9 %	10.8 %	2.7 %	5.1 %	0.4 %	4.2 %
Asset turnover rate	35.0 %	40.5 %	44.0 %	31.6 %	35.2 %	32.6 %	38.2 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	861,260	114,970	187,142	330,545	665,667	1,263,592	2,385,634
Current liabilities	619,695	60,511	128,505	197,351	457,832	893,996	1,904,051
Current ratio	1.39	1.90	1.46	1.67	1.45	1.41	1.25
Working capital	241,564	54,459	58,637	133,194	207,835	369,597	481,583
Change in working capital	-81,055	13,356	-7,912	-27,866	-48,069	-135,239	-249,672
Working capital to gross inc	23.0 %	46.2 %	24.7 %	32.8 %	26.6 %	25.6 %	15.0 %
Term debt coverage ratio	0.79	2.72	1.86	0.70	1.02	0.57	0.84
Replacement coverage ratio	0.55	2.26	1.45	0.47	0.68	0.38	0.63
Term debt to EBITDA	4.20	3.04	2.37	4.73	3.40	4.73	4.46
<b>Solvency (end of year at cost)</b>							
Number of farms	220	6	25	44	66	56	23
Total assets	3,356,626	472,329	766,917	1,657,835	2,540,199	4,768,276	9,079,543
Total liabilities	1,480,731	361,879	424,829	638,565	1,080,125	2,044,185	4,309,101
Net worth	1,875,895	110,450	342,088	1,019,270	1,460,074	2,724,091	4,770,442
Net worth change	5,096	30,160	22,829	7,203	50,555	-47,015	-28,315
Farm debt to asset ratio	46 %	76 %	58 %	43 %	45 %	44 %	50 %
Total debt to asset ratio	44 %	77 %	55 %	39 %	43 %	43 %	47 %
Change in earned net worth %	0 %	38 %	7 %	1 %	4 %	-2 %	-1 %
<b>Solvency (end of year at market)</b>							
Number of farms	220	6	25	44	66	56	23
Total assets	4,366,846	640,651	984,717	2,380,229	3,450,591	5,796,762	11,963,322
Total liabilities	1,794,520	369,304	460,057	777,522	1,295,412	2,435,282	5,434,487
Net worth	2,572,325	271,347	524,661	1,602,707	2,155,179	3,361,479	6,528,835
Total net worth change	50,868	23,134	36,807	88,916	66,447	-1,868	84,295
Farm debt to asset ratio	43 %	65 %	50 %	37 %	40 %	43 %	47 %
Total debt to asset ratio	41 %	58 %	47 %	33 %	38 %	42 %	45 %
Change in total net worth %	2 %	9 %	8 %	6 %	3 %	0 %	1 %
<b>Nonfarm Information</b>							
Net nonfarm income	26,390	36,510	30,150	36,799	30,583	12,963	20,408
<b>Crop Acres</b>							
Total crop acres	1,933	260	511	854	1,479	2,831	5,099
Total crop acres owned	383	74	119	195	326	459	1,091
Total crop acres cash rented	1,504	185	379	612	1,097	2,365	3,854
Total crop acres share rented	46	-	13	46	57	8	155
Machinery value per crop acre	345	50	149	323	347	358	357

**Financial Summary**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(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	220	28	52	41	54	45
<b>Income Statement</b>						
Gross cash farm income	1,026,955	535,257	825,885	1,135,968	1,371,876	1,052,018
Total cash farm expense	888,682	473,110	753,730	1,001,865	1,198,522	828,276
Net cash farm income	138,272	62,147	72,155	134,104	173,354	223,742
Inventory change	-18,550	18,384	60,841	-19,467	-38,599	-108,377
Depreciation	-69,231	-26,669	-45,255	-79,352	-93,739	-84,788
Net farm income from operations	50,492	53,862	87,741	35,285	41,016	30,577
Gain or loss on capital sales	2,980	-109	1,342	4,716	7,981	-789
Average net farm income	53,472	53,753	89,083	40,001	48,997	29,788
Median net farm income	32,530	32,602	54,053	42,660	19,773	26,139
<b>Profitability (cost)</b>						
Rate of return on assets	1.1 %	3.7 %	3.9 %	0.3 %	0.7 %	0.3 %
Rate of return on equity	-1.6 %	2.8 %	2.9 %	-3.1 %	-2.3 %	-2.1 %
Operating profit margin	3.2 %	6.4 %	8.6 %	0.8 %	2.0 %	1.1 %
Asset turnover rate	35.0 %	58.0 %	45.1 %	34.7 %	34.9 %	25.9 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	861,260	396,373	625,274	1,093,062	1,098,127	927,778
Current liabilities	619,695	277,584	465,192	825,076	808,282	597,673
Current ratio	1.39	1.43	1.34	1.32	1.36	1.55
Working capital	241,564	118,788	160,082	267,986	289,846	330,105
Change in working capital	-81,055	-27,051	-31,674	-110,910	-101,056	-120,519
Working capital to gross inc	23.0 %	21.0 %	18.2 %	22.9 %	20.6 %	32.7 %
Term debt coverage ratio	0.79	1.39	1.35	0.58	0.60	0.70
Replacement coverage ratio	0.55	1.30	1.00	0.42	0.40	0.45
Term debt to EBITDA	4.20	2.67	3.34	4.82	4.66	4.56
<b>Solvency (end of year at cost)</b>						
Number of farms	220	28	52	41	54	45
Total assets	3,356,626	1,194,548	2,274,864	3,736,936	4,357,858	4,403,973
Total liabilities	1,480,731	747,083	1,193,743	1,818,834	1,863,009	1,502,071
Net worth	1,875,895	447,466	1,081,121	1,918,102	2,494,849	2,901,902
Net worth change	5,096	35,067	66,028	-12,527	-13,359	-45,760
Farm debt to asset ratio	46 %	62 %	54 %	50 %	45 %	37 %
Total debt to asset ratio	44 %	63 %	52 %	49 %	43 %	34 %
Change in earned net worth %	0 %	9 %	7 %	-1 %	-1 %	-2 %
<b>Solvency (end of year at market)</b>						
Number of farms	220	28	52	41	54	45
Total assets	4,366,846	1,269,956	2,607,906	4,601,367	5,822,448	6,365,954
Total liabilities	1,794,520	791,089	1,332,274	2,215,722	2,294,403	1,969,407
Net worth	2,572,325	478,867	1,275,632	2,385,645	3,528,045	4,396,546
Total net worth change	50,868	35,984	82,673	19,382	59,739	41,419
Farm debt to asset ratio	43 %	63 %	53 %	50 %	42 %	33 %
Total debt to asset ratio	41 %	62 %	51 %	48 %	39 %	31 %
Change in total net worth %	2 %	8 %	7 %	1 %	2 %	1 %
<b>Nonfarm Information</b>						
Net nonfarm income	26,390	20,360	25,951	32,152	21,685	31,044
<b>Crop Acres</b>						
Total crop acres	1,933	1,598	1,547	2,136	2,462	1,770
Total crop acres owned	383	98	162	350	632	548
Total crop acres cash rented	1,504	1,472	1,351	1,759	1,792	1,125
Total crop acres share rented	46	28	34	27	38	96
Machinery value per crop acre	345	124	285	356	377	464

## EXPLANATORY NOTES FOR CROPS TABLES

The "Crop Enterprise Analysis" tables show the average physical production, gross return, direct costs, overhead costs, and net returns per acre. The "Net Return per Acre" is the "Gross Return per Acre" minus the direct and overhead costs. "Net Return" represents the return to the operators and family's unpaid labor, management, and equity. It represents the return to all of the resources which are owned by the farm family and hence, not purchased or paid a wage. Net returns are also calculated after a charge for unpaid operator labor and management and after an allocation of direct government payments. The last section of each crop table contains breakeven yield measures which provide useful standards or goals for the individual managers.

There are potentially three tables for each crop depending on the farmer's tenure on the land. The crop tables may be for (1) owned land, (2) cash rented land, and (3) share rented land. Individual farms may have data in all three tables if all three land tenure categories are represented in that farm business. When there are less than five farms with a particular crop and tenure, that table is not included in the report. Farms may be classified into the low 20%, the mid 20%, or the high 20% on the basis of net return per acre. The classification is done separately for each table, i.e., an individual farm may be in the low 20% for one crop, the high 20% for a second, and the middle 20% for a third crop. When there are less than 25 total farms with any particular crop and farmer's tenure, only overall averages are presented.

Market Facilitation Payments, a 2019 USDA FSA program for commodities impacted by retaliatory tariffs, are included under "Other crop income per acre." "Government payments" are ARC and PLC payments.

Several cost items, such as "utilities," "hired labor," and "interest paid," are listed under both "direct" and "overhead" costs because some of these costs are specific to that crop whereas others are general overhead costs of the farm. For example, "Machinery leases" as direct expense refers to machinery leased and used only in that crop enterprise; the most common example is the lease of equipment that is crop specific. However, cost of leasing machinery that is used for the entire farm operation is listed as an overhead cost. Interest payments are likewise divided into those incurred directly for a specific crop and those that are not. "Land Rent" is listed as a direct cost for each crop enterprise on cash rented land. In the case of double cropping, one-half of the rent is charged to each crop.

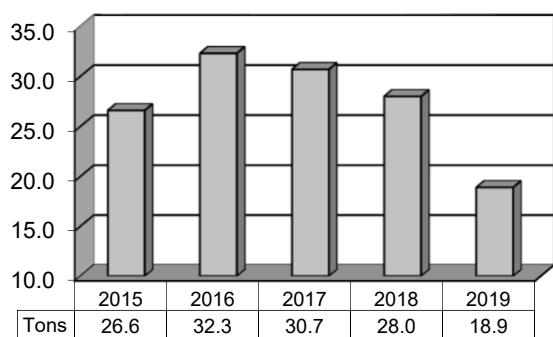
"Total direct expense per unit" and "Total dir & ovhd exp per unit" are calculated by dividing "Total direct expense per acre" and "Total dir & ovhd expenses per acre," respectively, by "Yield per acre." "With labor & management" is the breakeven yield after direct, overhead and a labor and management charge are considered. "Total exp less govt & oth income" is the breakeven yield after all costs (including a labor and management charge) are reduced by government payments and miscellaneous income.

In the last section of the crop table, "machinery cost per acre" is the sum of fuel, repairs, all custom hire and machinery leases, machinery depreciation and interest on intermediate debt.

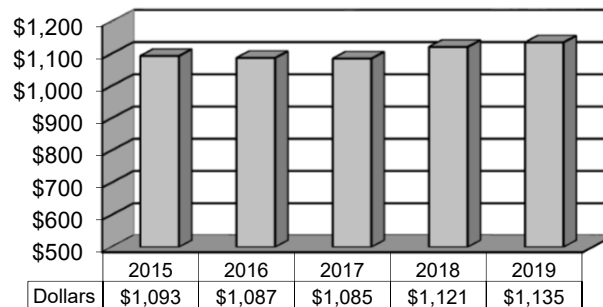
Rounding of individual items for the report may have caused minor discrepancies with the calculated totals.

# Five Year Crop History of Yields and Cost of Production Red River Valley Farm Business Management Education

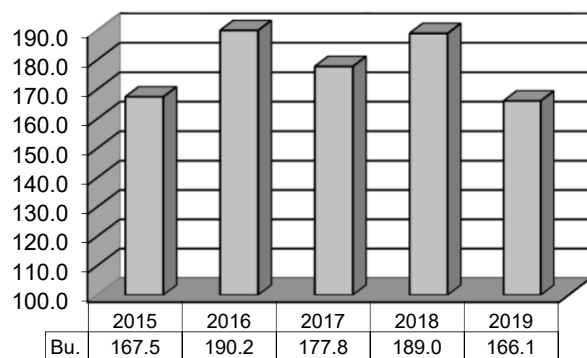
## Sugar Beet Yields



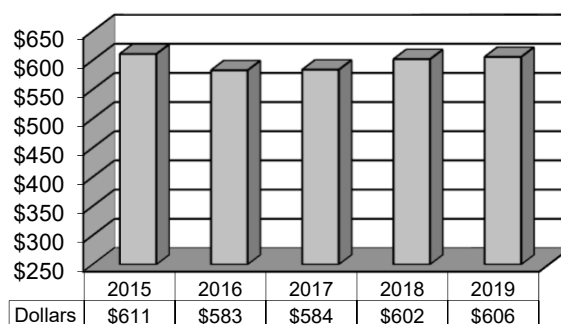
## Sugar Beet Total Listed Cost (cash rented land)



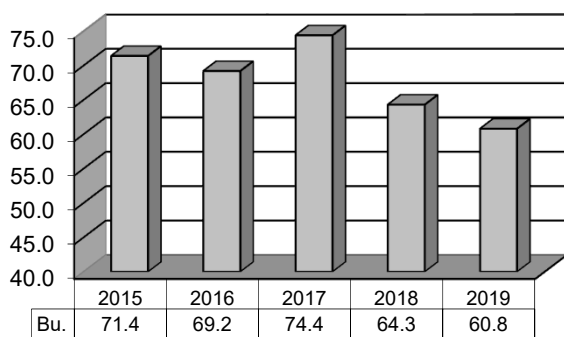
## Corn Yields



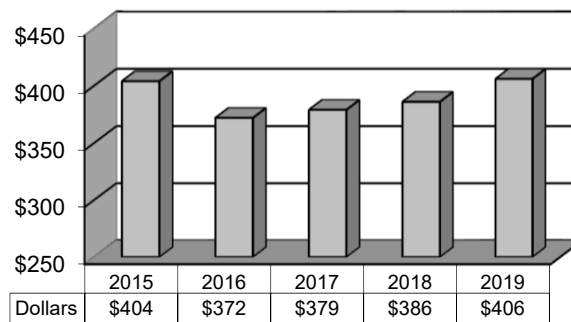
## Corn Total Listed Cost (cash rented land)



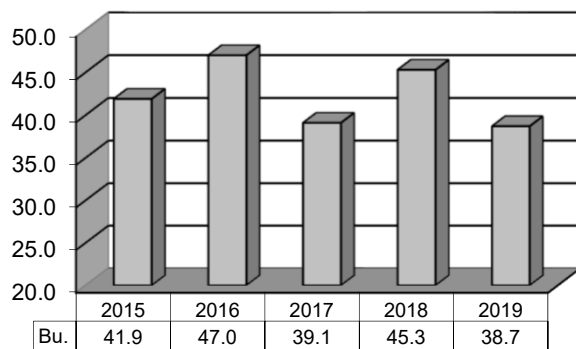
## Spring Wheat Yields



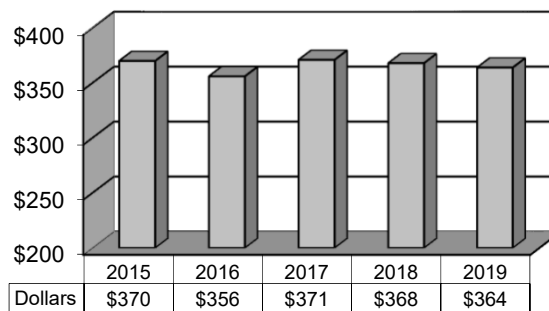
## Spring Wheat Total Listed Cost (cash rented land)



## Soybeans Yields



## Soybeans Total Listed Cost (cash rented land)



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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Barley on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	8
Acres	264.33
Yield per acre (bu.)	78.45
Operators share of yield %	100.00
Value per bu.	4.70
Total product return per acre	368.69
Crop insurance per acre	0.68
Other crop income per acre	51.49
Gross return per acre	420.86
<b>Direct Expenses</b>	
Seed and plants	20.87
Fertilizer	54.11
Crop chemicals	42.73
Crop insurance	10.84
Fuel & oil	13.98
Repairs	26.30
Custom hire	10.67
Land rent	86.89
Operating interest	9.19
Miscellaneous	5.01
Total direct expenses per acre	280.58
Return over direct exp per acre	140.27
<b>Overhead Expenses</b>	
Custom hire	0.62
Hired labor	14.65
Machinery leases	8.87
Building leases	0.20
Farm insurance	5.38
Utilities	5.28
Dues & professional fees	3.42
Interest	5.03
Mach & bldg depreciation	15.55
Miscellaneous	3.67
Total overhead expenses per acre	62.65
Total dir & ovhd expenses per acre	343.23
Net return per acre	77.62
Government payments	1.91
Net return with govt pmts	79.53
Labor & management charge	20.24
Net return over lbr & mgt	59.29
<b>Cost of Production</b>	
Total direct expense per bu.	3.58
Total dir & ovhd exp per bu.	4.38
Less govt & other income	3.69
With labor & management	3.94
Net value per unit	4.70
Machinery cost per acre	80.03
Est. labor hours per acre	1.40

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Beans, Navy on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	5
Acres	237.76
Yield per acre (cwt.)	19.09
Operators share of yield %	100.00
Value per cwt.	25.74
Total product return per acre	491.28
Crop insurance per acre	37.90
Other crop income per acre	56.98
Gross return per acre	586.15
<b>Direct Expenses</b>	
Seed and plants	60.16
Fertilizer	29.06
Crop chemicals	69.06
Crop insurance	23.39
Fuel & oil	18.19
Repairs	25.93
Hired labor	1.48
Land rent	156.15
Operating interest	8.56
Miscellaneous	1.18
Total direct expenses per acre	393.16
Return over direct exp per acre	193.00
<b>Overhead Expenses</b>	
Hired labor	18.48
Machinery leases	15.68
Building leases	4.25
Farm insurance	4.27
Utilities	5.13
Dues & professional fees	2.11
Interest	8.70
Mach & bldg depreciation	28.26
Miscellaneous	4.69
Total overhead expenses per acre	91.57
Total dir & ovhd expenses per acre	484.73
Net return per acre	101.42
Government payments	-
Net return with govt pmts	101.42
Labor & management charge	17.90
Net return over lbr & mgt	83.52
<b>Cost of Production</b>	
Total direct expense per cwt.	20.60
Total dir & ovhd exp per cwt.	25.40
Less govt & other income	20.43
With labor & management	21.36
Net value per unit	25.74
Machinery cost per acre	93.36
Est. labor hours per acre	0.96

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Corn on Owned Land**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	69	13	14	14
Acres	261.25	200.25	226.94	195.63
Yield per acre (bu.)	169.38	143.52	173.27	193.38
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.47	3.28	3.45	3.55
Total product return per acre	587.76	470.57	597.40	687.04
Hedging gains/losses per acre	0.85	-	4.84	-
Crop insurance per acre	12.73	27.44	0.54	11.15
Other crop income per acre	57.53	53.49	59.10	59.88
Gross return per acre	658.88	551.50	661.88	758.07
<b>Direct Expenses</b>				
Seed and plants	91.79	95.76	90.47	88.43
Fertilizer	120.68	109.74	128.53	115.53
Crop chemicals	25.55	28.32	25.50	26.19
Crop insurance	20.33	28.50	18.10	20.95
Drying expense	20.03	24.81	23.07	18.52
Fuel & oil	26.09	22.72	24.35	24.71
Repairs	43.31	42.71	52.14	38.80
Custom hire	6.26	10.00	3.82	3.46
Hired labor	1.22	0.06	2.54	-
Machinery leases	1.24	-	1.85	3.88
Operating interest	18.22	30.57	19.92	10.45
Miscellaneous	5.01	1.99	4.73	1.38
Total direct expenses per acre	379.73	395.18	395.00	352.30
Return over direct exp per acre	279.14	156.32	266.87	405.77
<b>Overhead Expenses</b>				
Hired labor	28.64	18.92	17.51	28.55
Machinery leases	9.43	2.59	9.04	10.85
Building leases	1.57	0.32	0.04	1.02
RE & pers. property taxes	25.01	26.96	23.50	22.27
Farm insurance	8.16	9.52	9.50	8.86
Utilities	7.03	10.10	9.24	7.41
Dues & professional fees	4.26	2.81	3.40	5.00
Interest	61.32	39.29	57.04	66.92
Mach & bldg depreciation	42.41	37.07	47.37	43.46
Miscellaneous	6.41	6.72	4.61	7.45
Total overhead expenses per acre	194.24	154.30	181.23	201.80
Total dir & ovhd expenses per acre	573.97	549.49	576.23	554.10
Net return per acre	84.90	2.02	85.64	203.97
Government payments	1.40	0.40	0.57	0.53
Net return with govt pmts	86.31	2.41	86.22	204.50
Labor & management charge	44.33	61.11	48.04	44.39
Net return over lbr & mgt	41.98	-58.70	38.18	160.11
<b>Cost of Production</b>				
Total direct expense per bu.	2.24	2.75	2.28	1.82
Total dir & ovhd exp per bu.	3.39	3.83	3.33	2.87
Less govt & other income	2.96	3.26	2.95	2.50
With labor & management	3.22	3.69	3.23	2.72
Net value per unit	3.48	3.28	3.48	3.55
Machinery cost per acre	128.14	113.44	135.88	125.98
Est. labor hours per acre	2.45	2.64	2.46	1.79

**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Corn on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	126	25	25	26
Acres	553.79	395.03	637.58	508.12
Yield per acre (bu.)	164.88	142.99	165.95	184.98
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.43	3.08	3.42	3.57
Total product return per acre	565.67	439.99	567.27	659.75
Hedging gains/losses per acre	2.59	-	3.38	3.62
Crop insurance per acre	10.07	10.03	7.18	14.71
Other crop income per acre	55.70	55.81	55.72	59.90
Gross return per acre	634.03	505.83	633.56	737.98
<b>Direct Expenses</b>				
Seed and plants	87.36	85.66	84.08	88.71
Fertilizer	118.58	114.82	119.53	124.46
Crop chemicals	24.90	25.91	23.35	25.15
Crop insurance	18.44	17.92	18.04	20.09
Drying expense	17.79	22.74	14.22	19.48
Fuel & oil	24.40	20.79	26.69	26.62
Repairs	42.52	46.92	45.30	45.69
Custom hire	6.02	11.89	1.39	2.05
Hired labor	1.84	0.57	1.41	0.19
Land rent	141.58	134.18	142.67	119.69
Machinery leases	1.22	1.40	3.01	0.43
Operating interest	13.81	9.10	18.36	13.43
Miscellaneous	3.78	3.16	1.32	1.46
Total direct expenses per acre	502.24	495.09	499.38	487.45
Return over direct exp per acre	131.79	10.74	134.18	250.53
<b>Overhead Expenses</b>				
Hired labor	21.53	27.81	18.53	29.79
Machinery leases	10.10	6.07	19.71	6.32
Building leases	2.70	0.36	2.80	0.41
Farm insurance	7.47	9.85	5.88	9.60
Utilities	6.16	7.15	5.26	7.32
Dues & professional fees	3.86	3.79	2.96	6.15
Interest	6.68	3.07	3.93	3.68
Mach & bldg depreciation	38.25	42.44	46.56	39.27
Miscellaneous	6.83	3.60	10.00	5.24
Total overhead expenses per acre	103.58	104.13	115.62	107.77
Total dir & ovhd expenses per acre	605.82	599.22	615.00	595.21
Net return per acre	28.21	-93.38	18.56	142.76
Government payments	1.36	0.23	2.85	0.99
Net return with govt pmts	29.57	-93.15	21.41	143.75
Labor & management charge	40.87	44.27	44.15	41.50
Net return over lbr & mgt	-11.30	-137.42	-22.74	102.25
<b>Cost of Production</b>				
Total direct expense per bu.	3.05	3.46	3.01	2.64
Total dir & ovhd exp per bu.	3.67	4.19	3.71	3.22
Less govt & other income	3.25	3.73	3.29	2.79
With labor & management	3.50	4.04	3.56	3.01
Net value per unit	3.45	3.08	3.44	3.59
Machinery cost per acre	124.86	129.48	138.00	122.00
Est. labor hours per acre	2.23	2.28	1.86	2.08



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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Hay, Alfalfa on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	6
Acres	102.50
Yield per acre (ton)	2.86
Operators share of yield %	100.00
Value per ton	125.91
Total product return per acre	360.16
Other crop income per acre	13.69
Gross return per acre	373.85
<b>Direct Expenses</b>	
Seed and plants	7.82
Fertilizer	25.40
Crop chemicals	16.14
Crop insurance	2.58
Packaging and supplies	1.16
Fuel & oil	15.15
Repairs	42.79
Custom hire	2.56
Land rent	140.44
Machinery leases	54.32
Hauling and trucking	1.30
Operating interest	11.56
Miscellaneous	8.95
Total direct expenses per acre	330.19
Return over direct exp per acre	43.66
<b>Overhead Expenses</b>	
Hired labor	15.38
Machinery leases	0.43
Farm insurance	4.65
Utilities	4.31
Dues & professional fees	5.28
Interest	1.59
Mach & bldg depreciation	15.14
Miscellaneous	1.35
Total overhead expenses per acre	48.13
Total dir & ovhd expenses per acre	378.32
Net return per acre	-4.47
Government payments	0.88
Net return with govt pmts	-3.59
Labor & management charge	28.29
Net return over lbr & mgt	-31.88
<b>Cost of Production</b>	
Total direct expense per ton	115.43
Total dir & ovhd exp per ton	132.26
Less govt & other income	127.16
With labor & management	137.06
Net value per unit	125.91
Machinery cost per acre	130.99
Est. labor hours per acre	1.54

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Soybeans on Owned Land**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	86	17	17	18
Acres	255.93	275.34	219.18	193.42
Yield per acre (bu.)	38.44	32.76	38.31	44.78
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.22	7.85	8.28	8.57
Total product return per acre	316.17	257.02	317.34	383.54
Hedging gains/losses per acre	0.26	-	-	-
Crop insurance per acre	12.25	4.75	3.87	15.91
Other crop income per acre	54.06	49.01	53.49	60.10
Gross return per acre	382.75	310.79	374.70	459.54
<b>Direct Expenses</b>				
Seed and plants	62.99	66.47	61.72	58.78
Fertilizer	10.65	17.16	4.79	2.33
Crop chemicals	31.83	28.36	32.16	32.38
Crop insurance	19.16	18.44	19.89	14.32
Fuel & oil	14.67	15.17	14.77	13.98
Repairs	26.16	27.85	26.54	21.50
Custom hire	6.35	16.27	3.52	2.97
Hired labor	1.11	0.71	0.20	0.76
Operating interest	8.26	8.07	7.02	7.71
Miscellaneous	2.71	2.35	2.07	1.16
Total direct expenses per acre	183.89	200.84	172.68	155.91
Return over direct exp per acre	198.85	109.95	202.03	303.64
<b>Overhead Expenses</b>				
Hired labor	12.93	11.14	11.96	18.01
Machinery leases	3.81	1.03	5.45	9.52
Building leases	0.80	0.74	0.39	1.27
RE & pers. property taxes	22.05	18.87	25.20	23.01
Farm insurance	8.76	9.75	8.26	6.54
Utilities	5.72	7.13	5.81	4.27
Dues & professional fees	3.27	2.96	3.88	3.22
Interest	42.30	42.20	67.55	51.41
Mach & bldg depreciation	28.70	23.40	29.75	31.05
Miscellaneous	4.83	7.82	1.84	7.88
Total overhead expenses per acre	133.16	125.05	160.10	156.19
Total dir & ovhd expenses per acre	317.05	325.89	332.78	312.10
Net return per acre	65.69	-15.10	41.93	147.45
Government payments	1.16	0.74	0.41	0.34
Net return with govt pmts	66.85	-14.36	42.34	147.79
Labor & management charge	30.28	27.55	30.57	33.99
Net return over lbr & mgt	36.58	-41.91	11.76	113.80
<b>Cost of Production</b>				
Total direct expense per bu.	4.78	6.13	4.51	3.48
Total dir & ovhd exp per bu.	8.25	9.95	8.69	6.97
Less govt & other income	6.49	8.28	7.18	5.27
With labor & management	7.27	9.12	7.98	6.02
Net value per unit	8.23	7.85	8.28	8.57
Machinery cost per acre	78.92	82.05	82.27	81.08
Est. labor hours per acre	1.50	1.64	1.36	1.29

**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Soybeans on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	148	29	29	30
Acres	561.58	478.64	594.04	565.81
Yield per acre (bu.)	38.73	35.45	37.51	44.05
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.30	7.87	8.25	8.69
Total product return per acre	321.35	279.12	309.42	382.96
Hedging gains/losses per acre	0.03	-	-	0.17
Crop insurance per acre	12.38	6.49	16.29	17.94
Other crop income per acre	54.12	52.56	54.47	58.36
Gross return per acre	387.89	338.17	380.18	459.42
<b>Direct Expenses</b>				
Seed and plants	58.22	60.46	57.20	56.26
Fertilizer	10.92	21.30	12.20	7.41
Crop chemicals	32.14	34.24	32.31	32.54
Crop insurance	17.29	18.15	17.99	18.29
Drying expense	0.27	0.00	0.90	0.29
Fuel & oil	13.90	15.36	15.40	14.63
Repairs	24.19	29.10	25.02	24.68
Custom hire	4.50	7.97	3.42	2.12
Hired labor	0.86	1.96	0.88	0.32
Land rent	129.01	138.29	122.85	115.45
Machinery leases	0.66	1.12	0.15	0.28
Operating interest	6.56	6.62	7.77	7.03
Miscellaneous	2.13	3.15	1.46	1.39
Total direct expenses per acre	300.66	337.74	297.54	280.69
Return over direct exp per acre	87.23	0.43	82.63	178.73
<b>Overhead Expenses</b>				
Hired labor	12.17	9.05	12.33	15.42
Machinery leases	4.62	3.10	3.87	6.52
Building leases	1.03	1.15	0.52	0.09
Farm insurance	6.74	8.28	6.40	7.33
Utilities	4.16	4.32	4.41	4.35
Dues & professional fees	3.67	3.39	2.99	5.93
Interest	3.39	3.33	1.86	1.86
Mach & bldg depreciation	24.45	24.15	23.46	26.97
Miscellaneous	3.74	5.77	2.69	3.59
Total overhead expenses per acre	63.98	62.52	58.53	72.05
Total dir & ovhd expenses per acre	364.63	400.26	356.07	352.74
Net return per acre	23.25	-62.09	24.10	106.69
Government payments	1.12	2.73	0.97	0.41
Net return with govt pmts	24.37	-59.37	25.07	107.09
Labor & management charge	26.03	24.28	28.35	26.38
Net return over lbr & mgt	-1.66	-83.64	-3.27	80.71
<b>Cost of Production</b>				
Total direct expense per bu.	7.76	9.53	7.93	6.37
Total dir & ovhd exp per bu.	9.41	11.29	9.49	8.01
Less govt & other income	7.67	9.55	7.58	6.26
With labor & management	8.34	10.23	8.34	6.86
Net value per unit	8.30	7.87	8.25	8.70
Machinery cost per acre	73.67	81.25	70.53	76.15
Est. labor hours per acre	1.34	1.28	1.35	1.32

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Soybeans Seed on Owned Land**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	12
Acres	313.05
Yield per acre (bu.)	41.85
Operators share of yield %	100.00
Value per bu.	9.46
Total product return per acre	395.82
Crop insurance per acre	11.78
Other crop income per acre	63.09
Gross return per acre	470.68
<b>Direct Expenses</b>	
Seed and plants	61.36
Fertilizer	12.29
Crop chemicals	35.03
Crop insurance	19.88
Drying expense	0.11
Fuel & oil	18.14
Repairs	26.82
Custom hire	2.99
Machinery leases	2.12
Operating interest	10.29
Miscellaneous	3.92
Total direct expenses per acre	192.95
Return over direct exp per acre	277.73
<b>Overhead Expenses</b>	
Hired labor	31.63
Machinery leases	6.13
Building leases	0.71
RE & pers. property taxes	23.30
Farm insurance	3.74
Utilities	3.68
Dues & professional fees	2.55
Interest	63.37
Mach & bldg depreciation	24.85
Miscellaneous	6.59
Total overhead expenses per acre	166.55
Total dir & ovhd expenses per acre	359.50
Net return per acre	111.18
Government payments	3.34
Net return with govt pmts	114.52
Labor & management charge	29.29
Net return over lbr & mgt	85.23
<b>Cost of Production</b>	
Total direct expense per bu.	4.61
Total dir & ovhd exp per bu.	8.59
Less govt & other income	6.72
With labor & management	7.42
Net value per unit	9.46
Machinery cost per acre	76.15
Est. labor hours per acre	2.87

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Soybeans Seed on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	25	5	5	5
Acres	601.89	557.38	598.61	933.42
Yield per acre (bu.)	40.19	38.08	38.78	43.74
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	9.45	9.28	9.55	9.58
Total product return per acre	379.61	353.31	370.41	419.12
Crop insurance per acre	14.65	3.97	24.57	13.57
Other crop income per acre	59.23	55.20	55.43	67.01
Gross return per acre	453.49	412.49	450.40	499.70
<b>Direct Expenses</b>				
Seed and plants	61.25	70.63	54.41	62.61
Fertilizer	10.15	12.10	14.49	2.93
Crop chemicals	36.22	43.31	35.82	33.98
Crop insurance	19.23	15.46	20.41	21.97
Drying expense	0.15	-	0.74	-
Fuel & oil	14.34	10.98	14.13	13.20
Repairs	26.90	31.52	27.64	19.70
Custom hire	2.31	4.20	4.42	0.24
Land rent	129.71	150.65	140.94	120.41
Machinery leases	2.65	7.85	-	0.57
Operating interest	8.33	5.79	4.49	9.66
Miscellaneous	6.25	6.91	4.35	3.98
Total direct expenses per acre	317.50	364.51	321.84	289.25
Return over direct exp per acre	135.99	47.98	128.56	210.45
<b>Overhead Expenses</b>				
Hired labor	22.10	18.56	15.87	40.40
Machinery leases	4.74	1.17	3.26	8.35
Building leases	0.55	0.02	0.35	0.30
Farm insurance	4.64	5.77	7.10	1.03
Utilities	3.38	3.27	5.43	1.83
Dues & professional fees	3.10	3.93	5.07	0.88
Interest	1.33	0.58	1.26	0.83
Mach & bldg depreciation	22.88	16.92	34.00	15.64
Miscellaneous	4.41	0.94	3.53	2.71
Total overhead expenses per acre	67.14	51.16	75.87	71.96
Total dir & ovhd expenses per acre	384.64	415.68	397.72	361.21
Net return per acre	68.85	-3.19	52.69	138.49
Government payments	2.29	0.32	1.05	5.55
Net return with govt pmts	71.14	-2.87	53.73	144.04
Labor & management charge	30.44	26.69	33.89	30.45
Net return over lbr & mgt	40.70	-29.55	19.84	113.59
<b>Cost of Production</b>				
Total direct expense per bu.	7.90	9.57	8.30	6.61
Total dir & ovhd exp per bu.	9.57	10.92	10.25	8.26
Less govt & other income	7.68	9.35	8.16	6.29
With labor & management	8.43	10.05	9.04	6.99
Net value per unit	9.45	9.28	9.55	9.58
Machinery cost per acre	71.34	70.32	81.58	54.86
Est. labor hours per acre	2.26	1.37	1.77	3.97

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Soybeans, Food on Cash Rent**

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	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	370.58
Yield per acre (bu.)	35.59
Operators share of yield %	100.00
Value per bu.	11.93
Total product return per acre	424.46
Crop insurance per acre	12.08
Other crop income per acre	55.49
Gross return per acre	492.02
<b>Direct Expenses</b>	
Seed and plants	20.90
Fertilizer	5.64
Crop chemicals	43.83
Crop insurance	17.14
Fuel & oil	13.84
Repairs	31.77
Custom hire	1.60
Hired labor	1.47
Land rent	159.15
Operating interest	8.22
Miscellaneous	4.41
Total direct expenses per acre	307.96
Return over direct exp per acre	184.06
<b>Overhead Expenses</b>	
Hired labor	12.43
Machinery leases	4.22
Building leases	2.78
Farm insurance	6.63
Utilities	4.62
Dues & professional fees	2.45
Interest	6.98
Mach & bldg depreciation	19.27
Miscellaneous	3.57
Total overhead expenses per acre	62.96
Total dir & ovhd expenses per acre	370.92
Net return per acre	121.11
Government payments	0.38
Net return with govt pmts	121.48
Labor & management charge	21.06
Net return over lbr & mgt	100.42
<b>Cost of Production</b>	
Total direct expense per bu.	8.65
Total dir & ovhd exp per bu.	10.42
Less govt & other income	8.51
With labor & management	9.11
Net value per unit	11.93
Machinery cost per acre	76.05
Est. labor hours per acre	1.00

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Sugar Beets on Owned Land, Excluding Joint Venture**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	31	6	6	7
Acres	121.20	139.07	146.83	87.27
Yield per acre (ton)	19.24	18.52	16.22	30.09
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	30.07	26.05	29.95	33.22
Total product return per acre	578.49	482.48	485.96	999.38
Crop insurance per acre	262.12	117.59	388.09	16.22
Other crop income per acre	7.88	8.53	5.80	10.75
Gross return per acre	848.48	608.61	879.84	1,026.34
<b>Direct Expenses</b>				
Seed and plants	216.23	191.85	227.45	226.01
Fertilizer	87.72	81.21	95.18	106.43
Crop chemicals	121.27	127.86	123.01	103.39
Crop insurance	28.24	34.73	24.50	18.56
Fuel & oil	54.81	51.96	63.21	59.58
Repairs	94.96	94.42	79.76	98.91
Custom hire	7.21	-	2.48	10.74
Hired labor	17.27	15.30	3.80	53.81
Hauling and trucking	0.90	4.03	-	-
Operating interest	26.06	38.88	26.58	23.40
Miscellaneous	81.61	49.29	121.24	9.83
Total direct expenses per acre	736.28	689.53	767.21	710.66
Return over direct exp per acre	112.20	-80.92	112.63	315.68
<b>Overhead Expenses</b>				
Hired labor	62.63	123.61	45.06	47.00
Machinery leases	15.78	20.35	15.75	5.19
Building leases	3.55	0.68	0.18	10.73
RE & pers. property taxes	28.20	27.23	29.28	23.58
Farm insurance	15.37	10.88	9.58	27.50
Utilities	12.07	13.82	11.16	14.04
Dues & professional fees	8.36	4.24	11.05	14.78
Interest	65.30	65.99	64.68	69.49
Mach & bldg depreciation	87.93	86.15	79.63	130.03
Miscellaneous	11.57	9.57	10.93	18.63
Total overhead expenses per acre	310.75	362.51	277.29	360.96
Total dir & ovhd expenses per acre	1,047.03	1,052.04	1,044.51	1,071.63
Net return per acre	-198.55	-443.43	-164.66	-45.29
Government payments	1.08	4.14	-	0.01
Net return with govt pmts	-197.47	-439.29	-164.66	-45.28
Labor & management charge	95.78	103.90	80.00	109.71
Net return over lbr & mgt	-293.24	-543.19	-244.67	-154.99
<b>Cost of Production</b>				
Total direct expense per ton	38.27	37.23	47.29	23.62
Total dir & ovhd exp per ton	54.42	56.81	64.38	35.62
Less govt & other income	40.33	49.77	40.10	34.72
With labor & management	45.31	55.38	45.03	38.37
Net value per unit	30.07	26.05	29.95	33.22
Machinery cost per acre	253.16	240.42	211.56	313.53
Est. labor hours per acre	6.39	12.50	3.12	6.09

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Sugar Beets on Owned Land, Joint Venture**

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	<u>Avg. Of All Farms</u>
Number of farms	15
Acres	134.85
Yield per acre (ton)	19.21
Operators share of yield %	100.00
Value per ton	32.25
Total product return per acre	619.45
Crop insurance per acre	295.47
Other crop income per acre	6.58
Gross return per acre	921.51
<b>Direct Expenses</b>	
Seed and plants	227.29
Fertilizer	97.13
Crop chemicals	128.55
Crop insurance	29.57
Fuel & oil	51.99
Repairs	90.93
Custom hire	10.23
Hired labor	27.02
Stock/quota lease	134.47
Machinery leases	4.43
Hauling and trucking	22.24
Operating interest	28.23
Miscellaneous	52.12
Total direct expenses per acre	904.19
Return over direct exp per acre	17.32
<b>Overhead Expenses</b>	
Hired labor	45.30
Machinery leases	9.51
Building leases	1.52
RE & pers. property taxes	26.68
Farm insurance	9.47
Utilities	11.09
Dues & professional fees	5.58
Interest	97.99
Mach & bldg depreciation	85.88
Miscellaneous	14.70
Total overhead expenses per acre	307.73
Total dir & ovhd expenses per acre	1,211.92
Net return per acre	-290.41
Government payments	0.35
Net return with govt pmts	-290.06
Labor & management charge	73.35
Net return over lbr & mgt	-363.41
<b>Cost of Production</b>	
Total direct expense per ton	47.08
Total dir & ovhd exp per ton	63.10
Less govt & other income	47.35
With labor & management	51.17
Net value per unit	32.25
Machinery cost per acre	249.63
Est. labor hours per acre	4.39

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Sugar Beets on Cash Rent, Excluding Joint Venture**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	57	11	12	12
Acres	259.44	285.19	264.61	160.13
Yield per acre (ton)	16.90	16.84	16.17	23.68
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	30.29	25.62	29.23	36.88
Total product return per acre	511.83	431.36	472.59	873.33
Crop insurance per acre	330.16	207.84	387.15	223.98
Other crop income per acre	8.66	16.61	6.92	13.84
Gross return per acre	850.65	655.81	866.66	1,111.14
<b>Direct Expenses</b>				
Seed and plants	223.23	201.64	233.35	225.30
Fertilizer	85.82	82.30	84.86	99.04
Crop chemicals	118.90	127.67	108.90	103.58
Crop insurance	28.12	30.53	32.19	25.04
Fuel & oil	55.14	55.84	60.60	52.73
Repairs	97.63	103.62	102.84	86.76
Custom hire	7.78	1.22	13.25	12.47
Hired labor	12.65	11.21	14.52	8.75
Land rent	129.23	124.08	116.76	140.87
Machinery leases	0.82	1.19	-	1.26
Hauling and trucking	7.76	-	5.09	25.35
Operating interest	22.67	34.63	21.05	14.06
Miscellaneous	72.40	68.63	93.51	41.06
Total direct expenses per acre	862.15	842.57	886.91	836.25
Return over direct exp per acre	-11.50	-186.77	-20.25	274.89
<b>Overhead Expenses</b>				
Hired labor	59.90	74.52	55.14	56.24
Machinery leases	14.19	21.38	3.25	25.49
Building leases	2.00	0.30	1.98	4.93
Farm insurance	15.27	10.12	17.69	16.46
Utilities	12.21	12.20	14.03	9.68
Dues & professional fees	8.46	4.69	10.69	11.12
Interest	11.01	6.50	9.20	9.90
Mach & bldg depreciation	88.55	64.54	98.67	103.65
Miscellaneous	15.12	14.64	21.25	19.79
Total overhead expenses per acre	226.72	208.90	231.90	257.25
Total dir & ovhd expenses per acre	1,088.86	1,051.47	1,118.81	1,093.50
Net return per acre	-238.21	-395.67	-252.15	17.63
Government payments	0.85	1.98	0.05	0.01
Net return with govt pmts	-237.36	-393.69	-252.10	17.64
Labor & management charge	93.53	89.31	93.32	95.40
Net return over lbr & mgt	-330.89	-483.00	-345.42	-77.75
<b>Cost of Production</b>				
Total direct expense per ton	51.02	50.05	54.85	35.32
Total dir & ovhd exp per ton	64.43	62.46	69.19	46.18
Less govt & other income	44.33	49.01	44.82	36.14
With labor & management	49.87	54.31	50.59	40.17
Net value per unit	30.29	25.62	29.23	36.88
Machinery cost per acre	264.85	247.41	267.59	283.13
Est. labor hours per acre	5.41	7.69	5.07	4.34

**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Sugar Beets on Cash Rent, Joint Venture**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	35	7	7	7
Acres	301.86	235.79	297.04	356.45
Yield per acre (ton)	18.26	15.46	17.08	22.16
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	31.85	30.23	31.20	33.56
Total product return per acre	581.58	467.34	532.85	743.57
Crop insurance per acre	327.06	342.67	352.11	258.73
Other crop income per acre	10.77	8.23	11.79	1.19
Gross return per acre	919.41	818.24	896.75	1,003.50
<b>Direct Expenses</b>				
Seed and plants	223.09	229.90	220.01	225.99
Fertilizer	92.27	93.69	78.88	87.38
Crop chemicals	114.68	125.04	118.27	108.41
Crop insurance	29.59	35.13	26.99	31.54
Fuel & oil	48.84	47.76	53.69	46.32
Repairs	87.61	101.80	81.27	88.07
Custom hire	18.38	40.91	20.91	9.79
Hired labor	18.08	22.28	28.67	17.98
Land rent	137.71	139.40	140.77	137.35
Stock/quota lease	116.52	180.45	119.99	61.62
Machinery leases	2.26	5.09	7.44	-
Hauling and trucking	13.85	22.59	32.05	6.46
Operating interest	26.14	28.82	19.83	21.86
Miscellaneous	83.13	113.39	68.15	24.97
Total direct expenses per acre	1,012.15	1,186.25	1,016.93	867.75
Return over direct exp per acre	-92.74	-368.00	-120.18	135.75
<b>Overhead Expenses</b>				
Hired labor	47.97	39.80	33.18	50.33
Machinery leases	12.13	2.45	2.52	18.92
Building leases	2.50	3.21	1.43	1.98
Farm insurance	13.67	8.63	10.70	14.73
Utilities	9.99	5.96	7.33	11.79
Dues & professional fees	7.42	7.03	6.46	7.54
Interest	11.63	10.96	5.27	22.58
Mach & bldg depreciation	74.30	74.43	64.83	78.92
Miscellaneous	10.99	5.73	9.19	17.34
Total overhead expenses per acre	190.62	158.20	140.91	224.12
Total dir & ovhd expenses per acre	1,202.77	1,344.45	1,157.84	1,091.87
Net return per acre	-283.36	-526.20	-261.09	-88.37
Government payments	0.59	0.22	0.52	0.69
Net return with govt pmts	-282.77	-525.98	-260.57	-87.68
Labor & management charge	84.32	91.62	80.65	76.00
Net return over lbr & mgt	-367.09	-617.61	-341.22	-163.68
<b>Cost of Production</b>				
Total direct expense per ton	55.44	76.72	59.54	39.16
Total dir & ovhd exp per ton	65.88	86.96	67.79	49.28
Less govt & other income	47.34	64.25	46.46	37.52
With labor & management	51.96	70.17	51.18	40.95
Net value per unit	31.85	30.23	31.20	33.56
Machinery cost per acre	247.69	277.68	228.37	252.70
Est. labor hours per acre	4.21	4.18	3.71	3.94

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Sunflowers on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	8
Acres	303.77
Yield per acre (cwt.)	20.92
Operators share of yield %	100.00
Value per cwt.	19.08
Total product return per acre	399.09
Crop insurance per acre	4.67
Other crop income per acre	40.25
Gross return per acre	444.01
<b>Direct Expenses</b>	
Seed and plants	41.26
Fertilizer	47.77
Crop chemicals	33.12
Crop insurance	15.07
Drying expense	1.41
Fuel & oil	17.60
Repairs	34.69
Custom hire	13.08
Land rent	108.10
Operating interest	7.03
Miscellaneous	1.48
Total direct expenses per acre	320.59
Return over direct exp per acre	123.43
<b>Overhead Expenses</b>	
Hired labor	12.53
Machinery leases	1.48
Farm insurance	9.50
Utilities	6.69
Dues & professional fees	6.72
Interest	3.16
Mach & bldg depreciation	31.06
Miscellaneous	6.91
Total overhead expenses per acre	78.05
Total dir & ovhd expenses per acre	398.64
Net return per acre	45.38
Government payments	0.16
Net return with govt pmts	45.54
Labor & management charge	34.65
Net return over lbr & mgt	10.89
<b>Cost of Production</b>	
Total direct expense per cwt.	15.33
Total dir & ovhd exp per cwt.	19.06
Less govt & other income	16.90
With labor & management	18.56
Net value per unit	19.08
Machinery cost per acre	99.30
Est. labor hours per acre	1.92

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**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

**Wheat, Spring on Owned Land**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	70	14	14	14
Acres	234.38	266.93	214.58	221.74
Yield per acre (bu.)	60.87	57.14	61.55	62.30
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.92	4.59	4.76	5.60
Total product return per acre	299.17	262.09	293.01	349.19
Crop insurance per acre	42.58	33.42	60.36	59.10
Other crop income per acre	56.75	53.77	52.08	59.13
Gross return per acre	398.50	349.28	405.45	467.42
<b>Direct Expenses</b>				
Seed and plants	23.17	22.57	24.17	23.94
Fertilizer	88.01	89.39	92.54	78.07
Crop chemicals	29.57	32.64	29.49	27.05
Crop insurance	14.52	13.82	15.35	17.82
Drying expense	0.85	0.62	0.91	0.26
Fuel & oil	14.35	16.44	14.84	13.84
Repairs	25.19	31.00	30.25	19.52
Custom hire	7.00	14.03	6.09	6.33
Hired labor	1.31	-	2.12	4.49
Machinery leases	0.73	0.13	-	0.51
Operating interest	7.24	11.10	5.78	6.25
Miscellaneous	3.65	6.36	2.86	2.16
Total direct expenses per acre	215.58	238.11	224.41	200.25
Return over direct exp per acre	182.92	111.17	181.04	267.17
<b>Overhead Expenses</b>				
Hired labor	14.36	14.20	10.90	10.05
Machinery leases	4.37	2.06	2.17	5.89
Building leases	0.94	1.60	0.96	0.54
RE & pers. property taxes	22.43	24.34	20.55	21.49
Farm insurance	9.22	14.07	7.00	6.97
Utilities	4.55	6.27	4.68	3.83
Dues & professional fees	3.39	3.32	3.00	2.43
Interest	47.73	33.79	46.78	66.29
Mach & bldg depreciation	27.06	25.08	25.65	29.27
Miscellaneous	7.07	14.61	3.47	7.95
Total overhead expenses per acre	141.12	139.33	125.17	154.71
Total dir & ovhd expenses per acre	356.70	377.43	349.58	354.96
Net return per acre	41.80	-28.16	55.87	112.46
Government payments	1.20	1.42	0.23	0.13
Net return with govt pmts	43.00	-26.74	56.10	112.58
Labor & management charge	28.05	21.41	25.16	29.45
Net return over lbr & mgt	14.95	-48.15	30.94	83.13
<b>Cost of Production</b>				
Total direct expense per bu.	3.54	4.17	3.65	3.21
Total dir & ovhd exp per bu.	5.86	6.61	5.68	5.70
Less govt & other income	4.21	5.05	3.85	3.80
With labor & management	4.67	5.43	4.26	4.27
Net value per unit	4.92	4.59	4.76	5.60
Machinery cost per acre	77.48	86.42	75.39	76.35
Est. labor hours per acre	1.61	1.82	1.13	1.39

**Crop Enterprise Analysis**  
**Minnesota and North Dakota Farm Business Management Education**  
**Red River Valley, 2019**  
**(Farms Sorted By Return to Overhead)**

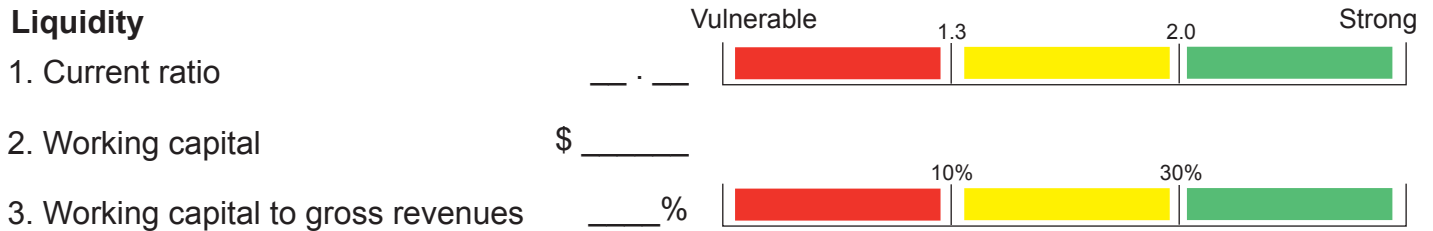
**Wheat, Spring on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	114	22	23	23
Acres	522.32	297.19	620.84	468.02
Yield per acre (bu.)	60.78	52.65	62.83	64.18
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.92	4.56	4.88	5.24
Total product return per acre	298.94	240.19	306.61	336.15
Hedging gains/losses per acre	0.26	1.67	-	0.43
Crop insurance per acre	52.24	33.69	44.12	72.91
Other crop income per acre	53.54	57.53	55.91	51.43
Gross return per acre	404.98	333.08	406.63	460.92
<b>Direct Expenses</b>				
Seed and plants	21.87	25.98	21.15	21.49
Fertilizer	91.02	98.52	95.50	82.04
Crop chemicals	31.30	26.86	31.99	31.43
Crop insurance	14.11	13.39	13.98	16.03
Drying expense	0.78	1.71	2.12	0.16
Fuel & oil	14.74	14.00	15.58	13.21
Repairs	25.96	24.92	26.55	20.46
Custom hire	6.02	9.03	6.46	2.82
Hired labor	0.78	-	-	1.18
Land rent	121.68	142.87	125.02	104.38
Machinery leases	0.87	5.46	0.06	1.28
Operating interest	6.24	8.03	6.43	5.17
Miscellaneous	4.29	10.79	4.48	3.59
Total direct expenses per acre	339.66	381.56	349.31	303.24
Return over direct exp per acre	65.32	-48.48	57.32	157.69
<b>Overhead Expenses</b>				
Hired labor	13.66	10.50	11.69	11.36
Machinery leases	3.61	1.90	0.92	7.00
Building leases	1.11	0.03	0.99	1.56
Farm insurance	6.76	5.75	7.60	6.43
Utilities	3.68	3.19	3.66	3.25
Dues & professional fees	3.73	4.92	3.84	3.64
Interest	3.11	1.99	3.23	4.11
Mach & bldg depreciation	26.03	21.45	29.91	25.49
Miscellaneous	4.45	3.05	3.79	2.68
Total overhead expenses per acre	66.14	52.78	65.64	65.51
Total dir & ovhd expenses per acre	405.80	434.34	414.95	368.75
Net return per acre	-0.82	-101.25	-8.31	92.18
Government payments	0.90	1.52	0.48	0.96
Net return with govt pmts	0.08	-99.73	-7.83	93.14
Labor & management charge	27.24	29.09	28.95	30.36
Net return over lbr & mgt	-27.16	-128.83	-36.78	62.77
<b>Cost of Production</b>				
Total direct expense per bu.	5.59	7.25	5.56	4.72
Total dir & ovhd exp per bu.	6.68	8.25	6.60	5.75
Less govt & other income	4.92	6.46	5.00	3.79
With labor & management	5.37	7.01	5.47	4.26
Net value per unit	4.92	4.59	4.88	5.24
Machinery cost per acre	77.45	77.34	79.88	71.00
Est. labor hours per acre	1.42	1.50	1.34	1.30

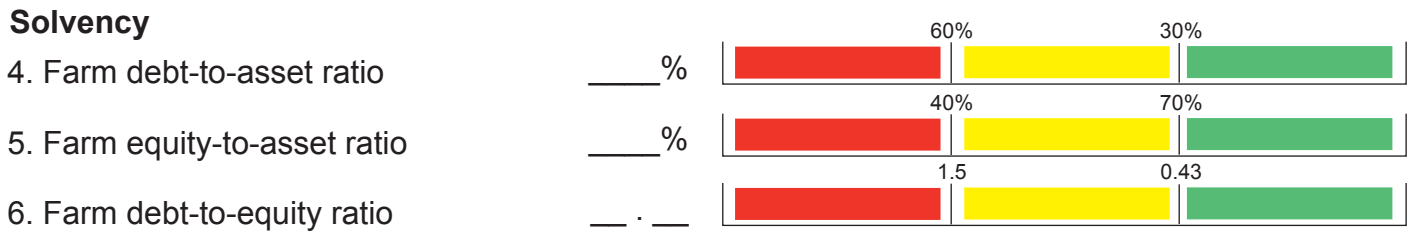
# Farm Finance Scorecard

Year \_\_\_\_\_

## Liquidity



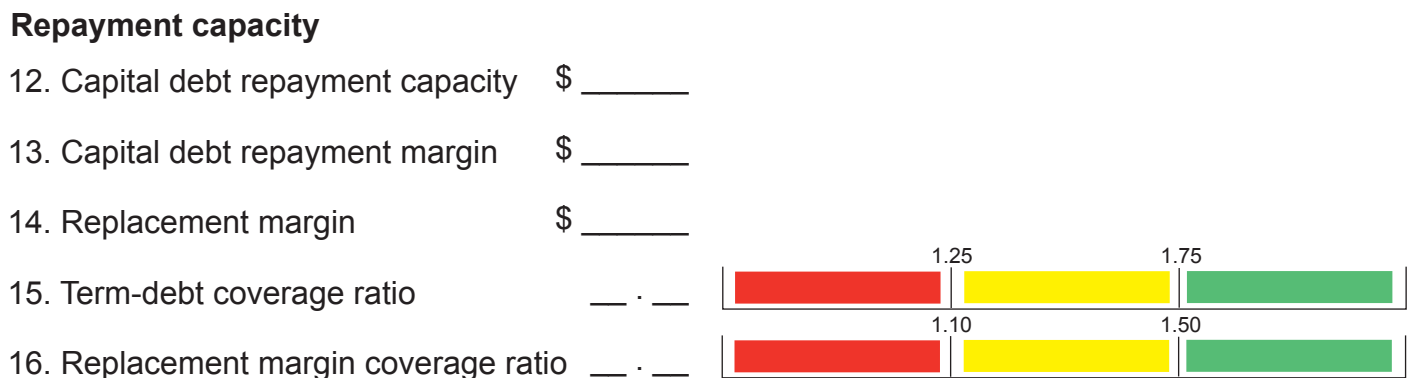
## Solvency



## Profitability



## Repayment capacity



## Financial efficiency

