

Minnesota and North Dakota
Farm Business Management Education

Red River Valley 2013 Report



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Minnesota Farm Business Management Education
and
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RED RIVER VALLEY AVERAGES
2013 ANNUAL REPORT

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2013 Red River Valley Report
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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 2013 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.

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 table lists cash farm income from all sources. There are three possible sources of cash income from crops. The first is income from cash sales. The second is income from crops stored under government loan programs when the loan is treated as income for the year in which the crop was stored. If the crop value has not been entered as income when it was stored, then it would be treated as cash income in the year it was sold. The third is Net Government Sales, which refers to the difference between income credited in the year a crop was stored and the actual cash income received at the time it was sold. There are two categories of cash income from livestock sales. "Raised" steer, hogs, and lambs refer to animals raised from birth to market weight on the farm. "Finished" animals refers to those purchased as feeders and fed to market weight. Government payments are grouped as "Direct, CCP & ACRE pymts;" "LDP payments" which are loan deficiency payments that may be received on production when local prices are below the county loan rate for the crop; "Other government payments" which refers to all other government payments such as disaster payments but not including CRP payments; and CRP payments.

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 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 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 \$20,000 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."

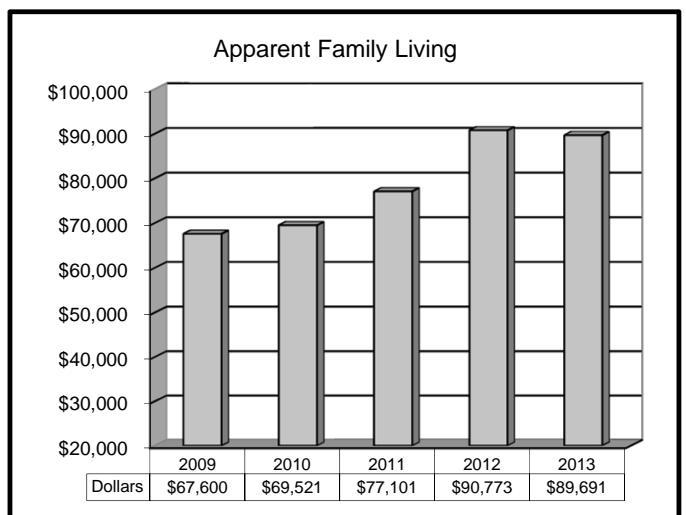
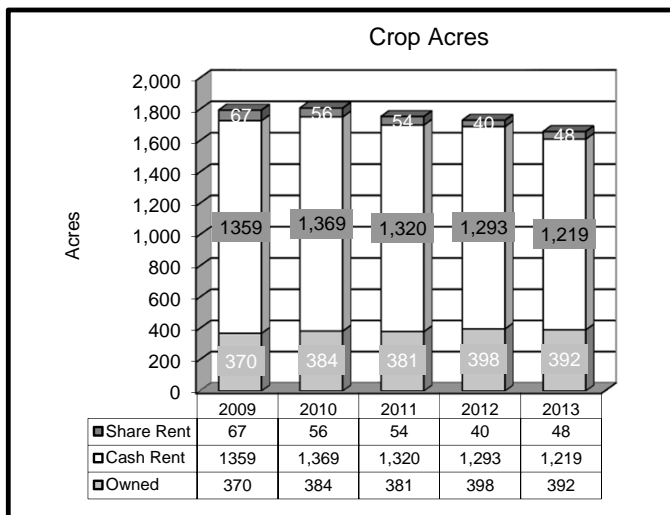
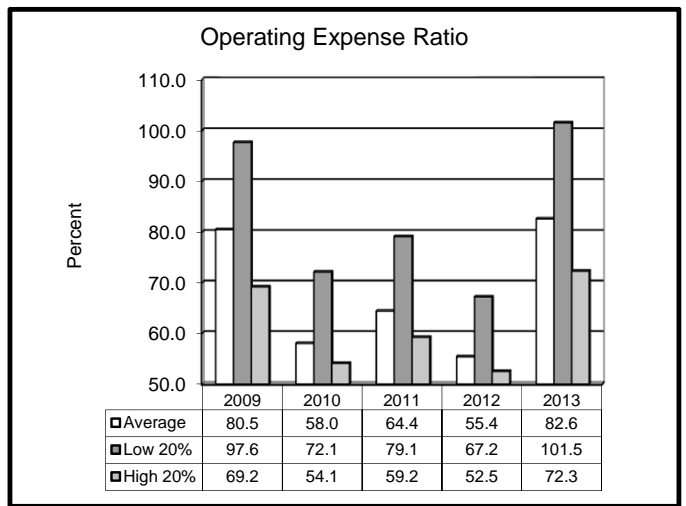
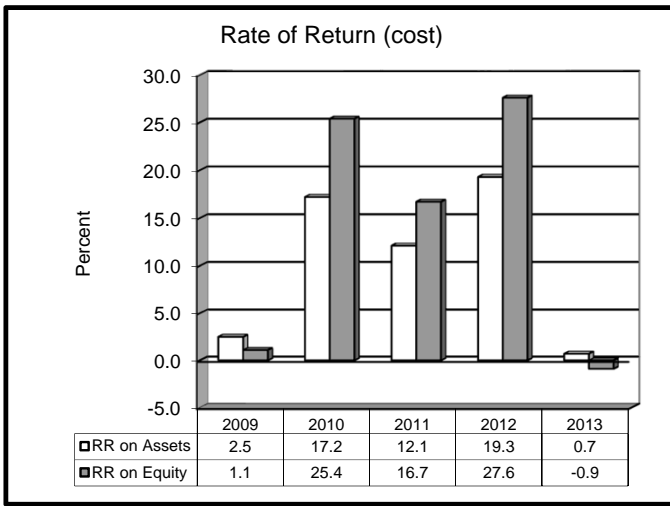
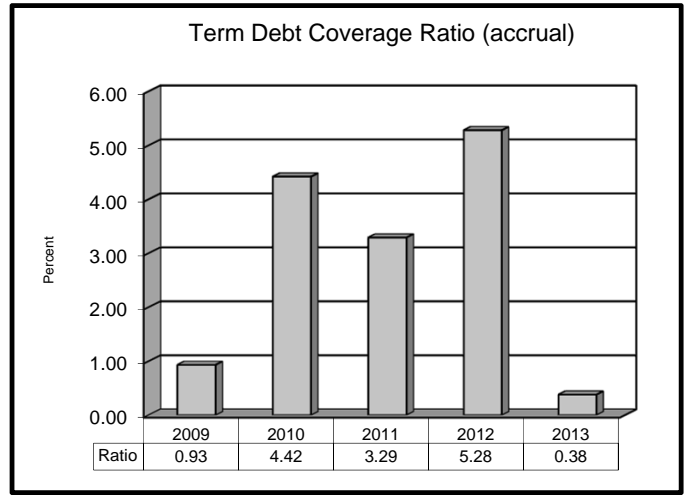
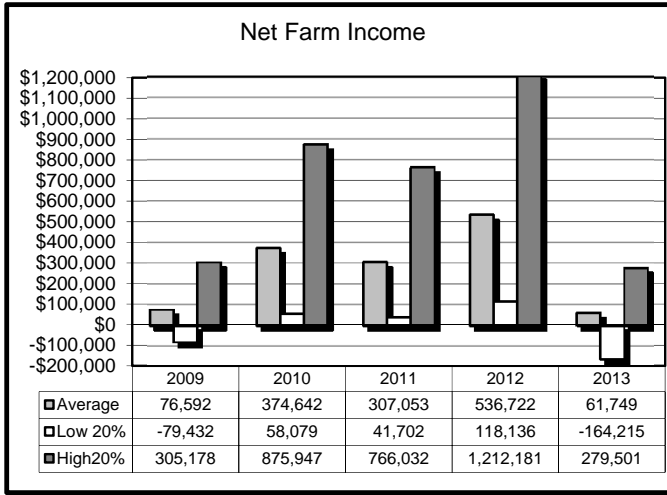
Operator and Labor Information

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



Farm Income Statement
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Cash Farm Income				
Barley	2,744	3,431	16	7,476
Beans, Black Turtle	2,013	4,933	-	-
Beans, Dark Red Kidney	371	-	-	1,847
Beans, Navy	2,266	-	-	2,657
Beans, Pinto	7,589	15,979	-	16,453
Canola	167	-	-	834
Corn	332,029	331,578	252,749	561,729
Hay, Alfalfa	1,178	-	-	5,287
Hay, Mixed	27	139	-	-
Potatoes	9,120	-	-	45,407
Potatoes, Seed	2,079	-	-	10,349
Soybeans	320,827	395,339	236,851	454,095
Straw	2,343	11,577	107	45
Sugar Beets	206,544	340,065	149,494	237,915
Sunflowers	1,451	5,487	250	583
Wheat, Durum	661	-	-	3,292
Wheat, Spring	103,183	195,177	70,058	116,187
Soybeans, Organic	363	-	1,395	-
Soybeans, Food	5,237	-	8,504	16,382
Wheat, Spring, Organic	214	-	-	-
Miscellaneous crop income	178	585	1	-
Beef Cow-Calf, Beef Calves	250	-	811	431
Beef Backgrounding	247	-	723	-
Beef Finishing	3,901	-	-	19,421
Hogs, Farrow To Finish, Raised Hog	5,330	-	-	11,978
Dairy Feeder	300	1,524	-	-
Cull breeding livestock	299	-	831	565
Misc. livestock income	142	-	-	502
Direct, CCP & ACRE pymts	21,133	30,080	14,755	30,017
CRP payments	1,075	1,444	514	2,249
Other government payments	10,176	2,729	5,536	17,692
Custom work income	7,305	7,515	5,351	8,489
Patronage dividends, cash	13,262	16,701	9,009	20,166
Crop insurance income	30,979	60,363	17,099	39,062
Property insurance income	1,289	1,027	61	1,762
Sale of resale items	1,620	580	1,698	5,556
Other farm income	24,854	42,313	20,440	28,386
Gross Cash Farm Income	1,122,746	1,468,565	796,254	1,666,815

Farm Income Statement (Continued)
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	234	46	47	47
Cash Farm Expense				
Seed	124,293	156,916	89,971	176,973
Fertilizer	116,534	164,741	82,203	163,579
Crop chemicals	57,850	83,373	39,398	79,271
Crop insurance	43,099	59,725	27,317	59,683
Drying expense	6,924	7,439	5,542	11,101
Storage	556	674	286	1,281
Irrigation energy	441	-	-	1,936
Crop custom hire	6,686	8,186	5,473	9,753
Hauling and trucking	1,282	2,367	-	3,230
Crop marketing	1,054	1,746	55	1,268
Crop miscellaneous	1,421	2,215	1,639	1,864
Consultants	2,970	5,358	2,034	4,108
Feeder livestock purchase	2,320	850	516	9,730
Purchased feed	4,011	470	125	12,066
Breeding fees	56	-	-	143
Veterinary	176	85	70	606
Supplies	152	66	153	107
Livestock marketing	194	-	71	61
Interest	31,881	43,609	26,102	41,934
CCC buyback	5,800	10,474	3,869	9,843
Fuel & oil	53,657	81,906	39,150	69,347
Repairs	70,983	111,352	53,142	87,260
Custom hire	6,833	13,752	2,809	8,847
Hired labor	40,314	69,220	24,506	56,940
Land rent	143,352	208,924	102,503	209,409
Stock/quota lease	22,626	43,913	19,697	19,459
Machinery leases	7,765	10,743	4,560	5,500
Building leases	2,413	4,997	1,344	3,149
Real estate taxes	8,793	9,231	6,275	14,226
Farm insurance	14,290	20,874	8,641	20,157
Utilities	9,579	12,559	7,405	12,751
Dues & professional fees	7,339	9,783	4,943	9,844
Purchase of resale items	2,801	5,199	294	8,563
Miscellaneous	8,547	13,552	7,280	11,242
Total cash expense	806,992	1,164,300	567,371	1,125,231
Net cash farm income	315,755	304,265	228,882	541,584
Inventory Changes				
Prepays and supplies	-26,985	-60,659	-30,457	-16,638
Accounts receivable	13,935	42,207	11,091	-5,457
Hedging accounts	3,381	-2,235	-38	20,249
Other current assets	279	591	2,152	-445
Crops and feed	-170,534	-344,718	-102,871	-160,323
Market livestock	9	-17	185	-132
Breeding livestock	-126	65	-89	-456
Other assets	3,228	69	3,304	7,339
Accounts payable	-2,021	-473	668	-4,948
Accrued interest	-823	-2,562	-437	948
Total inventory change	-179,658	-367,734	-116,491	-159,862
Net operating profit	136,097	-63,469	112,391	381,722
Depreciation				
Machinery and equipment	-65,133	-89,842	-43,593	-88,272
Titled vehicles	-4,563	-4,280	-3,680	-5,844
Buildings and improvements	-5,200	-6,624	-4,039	-8,850
Total depreciation	-74,895	-100,746	-51,311	-102,966
Net farm income from operations	61,202	-164,215	61,080	278,756
Gain or loss on capital sales	547	-	-	745
Net farm income	61,749	-164,215	61,080	279,501

Inventory Changes
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	234	46	47	47
Net cash farm income	315,755	304,265	228,882	541,584
Crops and Feed				
Ending inventory	559,885	669,948	380,276	904,089
Beginning inventory	730,419	1,014,667	483,147	1,064,412
Inventory change	-170,534	-344,718	-102,871	-160,323
Market Livestock				
Ending inventory	4,061	122	1,015	12,794
Beginning inventory	4,052	139	830	12,926
Inventory change	9	-17	185	-132
Accts Receivable				
Ending inventory	93,206	123,845	61,582	153,929
Beginning inventory	79,272	81,639	50,491	159,386
Inventory change	13,935	42,207	11,091	-5,457
Prepaid Expenses and Supplies				
Ending inventory	115,429	115,258	74,930	203,057
Beginning inventory	142,414	175,918	105,387	219,695
Inventory change	-26,985	-60,659	-30,457	-16,638
Hedging Activities				
Ending inventory	6,572	4,917	636	19,529
Withdrawals	4,298	765	596	19,851
Beginning inventory	5,474	5,471	1,040	12,994
Deposits	2,014	2,446	230	6,137
Gain or loss	3,381	-2,235	-38	20,249
Other Current Assets				
Ending inventory	1,532	3,138	2,205	2,152
Beginning inventory	1,253	2,547	53	2,598
Inventory change	279	591	2,152	-445
Breeding Livestock				
Ending inventory	941	239	1,268	1,294
Capital sales	-	-	-	-
Beginning inventory	1,045	174	1,304	1,697
Capital purchases	21	-	53	53
Depreciation, capital adjust	-126	65	-89	-456
Other Capital Assets				
Ending inventory	265,071	447,303	196,000	334,256
Capital sales	3,349	3,217	3,514	10,013
Beginning inventory	250,805	426,421	187,237	318,984
Capital purchases	14,386	24,029	8,972	17,945
Depreciation, capital adjust	3,228	69	3,304	7,339
Accounts Payable				
Beginning inventory	24,780	29,659	22,108	30,842
Ending inventory	26,801	30,132	21,440	35,789
Inventory change	-2,021	-473	668	-4,948
Accrued Interest				
Beginning inventory	14,157	21,886	12,459	15,440
Ending inventory	14,979	24,448	12,894	14,492
Inventory change	-823	-2,562	-437	948
Total inventory change	-179,658	-367,734	-116,491	-159,862
Net operating profit	136,097	-63,469	112,391	381,722

Depreciation
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Net operating profit	136,097	-63,469	112,391	381,722
Machinery and Equipment				
Ending inventory	739,269	973,270	501,538	1,038,810
Capital sales	11,634	9,784	5,561	28,005
Beginning inventory	652,089	867,069	442,210	919,542
Capital purchases	163,947	205,827	108,482	235,544
Depreciation, capital adjust.	-65,133	-89,842	-43,593	-88,272
Titled Vehicles				
Ending inventory	48,008	47,811	42,146	62,148
Capital sales	372	-	449	377
Beginning inventory	43,106	44,420	37,726	50,806
Capital purchases	9,837	7,671	8,549	17,562
Depreciation, capital adjust.	-4,563	-4,280	-3,680	-5,844
Buildings and Improvements				
Ending inventory	196,689	204,947	157,970	341,642
Capital sales	171	650	-	-
Beginning inventory	169,220	195,339	133,868	265,421
Capital purchases	32,840	16,882	28,141	85,071
Depreciation, capital adjust.	-5,200	-6,624	-4,039	-8,850
Total depreciation, capital adj.	-74,895	-100,746	-51,311	-102,966
Net farm income from operations	61,202	-164,215	61,080	278,756
Gain or loss on capital sales	547	-	-	745
Net farm income	61,749	-164,215	61,080	279,501

Profitability Measures
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Profitability (assets valued at cost)				
Net farm income from operations	61,202	-164,215	61,080	278,756
Rate of return on assets	0.7 %	-6.6 %	1.6 %	5.2 %
Rate of return on equity	-0.9 %	-13.3 %	0.3 %	6.1 %
Operating profit margin	1.8 %	-18.8 %	4.2 %	14.2 %
Asset turnover rate	35.8 %	34.8 %	36.8 %	36.9 %
Farm interest expense	32,703	46,171	26,538	40,986
Value of operator lbr and mgmt.	76,276	99,909	57,542	106,766
Return on farm assets	17,629	-217,953	30,076	212,975
Average farm assets	2,688,684	3,321,572	1,924,490	4,059,335
Return on farm equity	-15,075	-264,124	3,538	171,990
Average farm equity	1,723,650	1,979,047	1,152,140	2,835,570
Value of farm production	963,714	1,157,418	708,874	1,497,768

Liquidity & Repayment Capacity Measures
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Liquidity				
Current ratio	1.97	1.46	1.63	3.06
Working capital	420,957	315,601	220,611	972,377
Working capital to gross inc	43.3 %	27.1 %	31.1 %	63.6 %
Current assets	855,222	997,662	573,327	1,444,171
Current liabilities	434,265	682,061	352,716	471,794
Gross revenues (accrual)	972,846	1,163,937	709,809	1,528,127
Repayment capacity				
Net farm income from operations	61,202	-164,215	61,080	278,756
Depreciation	74,895	100,746	51,311	102,966
Personal income	22,187	14,749	20,852	31,853
Family living/owner withdrawals	-93,345	-119,578	-64,300	-124,556
Payments on personal debt	-6,511	-5,327	-6,337	-9,731
Income taxes paid	-39,742	-32,910	-27,036	-68,661
Interest on term debt	26,026	31,124	21,758	33,011
Capital debt repayment capacity	44,711	-175,411	57,328	243,638
Scheduled term debt payments	-118,167	-177,794	-85,401	-159,313
Capital debt repayment margin	-73,455	-353,205	-28,073	84,325
Cash replacement allowance	-28,914	-34,768	-16,239	-39,532
Replacement margin	-102,369	-387,972	-44,312	44,793
Term debt coverage ratio	0.38	-0.99	0.67	1.53
Replacement coverage ratio	0.30	-0.83	0.56	1.23

Balance Sheet at Cost Values
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Assets				
Current Farm Assets				
Cash and checking balance	51,037	29,374	30,306	124,912
Prepaid expenses & supplies	115,429	115,258	74,930	203,057
Growing crops	200	589	182	102
Accounts receivable	93,206	123,845	61,582	153,929
Hedging accounts	6,572	4,917	636	19,529
Crops held for sale or feed	567,481	676,417	381,040	919,705
Crops under government loan	15,905	44,591	21,613	8,093
Market livestock held for sale	4,061	122	1,015	12,794
Other current assets	1,331	2,549	2,023	2,050
Total current farm assets	855,222	997,662	573,327	1,444,171
Intermediate Farm Assets				
Breeding livestock	941	239	1,268	1,294
Machinery and equipment	739,269	973,270	501,538	1,038,810
Titled vehicles	48,008	47,811	42,146	62,148
Other intermediate assets	192,712	333,389	157,248	233,117
Total intermediate farm assets	980,930	1,354,709	702,200	1,335,369
Long Term Farm Assets				
Farm land	596,513	567,636	449,182	919,989
Buildings and improvements	196,689	204,947	157,970	341,642
Other long-term assets	72,358	113,914	38,752	101,139
Total long-term farm assets	865,561	886,496	645,904	1,362,770
Total Farm Assets	2,701,713	3,238,867	1,921,431	4,142,310
Total Nonfarm Assets	257,111	190,982	256,139	353,945
Total Assets	2,958,824	3,429,849	2,177,570	4,496,254
Liabilities				
Current Farm Liabilities				
Accrued interest	14,993	24,503	12,905	14,494
Accounts payable	26,801	30,132	21,440	35,789
Current notes	294,142	482,778	245,746	289,655
Government crop loans	7,301	20,734	10,216	3,214
Principal due on term debt	91,029	123,914	62,409	128,642
Total current farm liabilities	434,265	682,061	352,716	471,794
Total intermediate farm liabs	209,080	311,436	157,673	266,652
Total long term farm liabilities	373,106	429,250	275,054	541,234
Total farm liabilities	1,016,451	1,422,747	785,442	1,279,680
Total nonfarm liabilities	65,455	65,525	83,976	67,100
Total liabilities	1,081,907	1,488,272	869,418	1,346,780
Net worth (farm and nonfarm)	1,876,917	1,941,577	1,308,152	3,149,475
Net worth change	-45,911	-305,247	-1,556	115,239
Percent net worth change	-2 %	-14 %	0 %	4 %
Ratio Analysis				
Current farm liabilities / assets	51 %	68 %	62 %	33 %
Intermediate farm liab. / assets	21 %	23 %	22 %	20 %
Long term farm liab. / assets	43 %	48 %	43 %	40 %
Total debt to asset ratio	37 %	43 %	40 %	30 %

Balance Sheet at Market Values
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Assets				
Current Farm Assets				
Cash and checking balance	51,037	29,374	30,306	124,912
Prepaid expenses & supplies	115,429	115,258	74,930	203,057
Growing crops	200	589	182	102
Accounts receivable	93,206	123,845	61,582	153,929
Hedging accounts	6,572	4,917	636	19,529
Crops held for sale or feed	567,481	676,417	381,040	919,705
Crops under government loan	15,905	44,591	21,613	8,093
Market livestock held for sale	4,061	122	1,015	12,794
Other current assets	1,331	2,549	2,023	2,050
Total current farm assets	855,222	997,662	573,327	1,444,171
Intermediate Farm Assets				
Breeding livestock	1,221	526	1,921	1,758
Machinery and equipment	887,166	1,162,622	595,184	1,279,068
Titled vehicles	55,440	53,892	44,778	75,227
Other intermediate assets	235,094	374,852	180,417	286,058
Total intermediate farm assets	1,178,922	1,591,892	822,299	1,642,111
Long Term Farm Assets				
Farm land	1,161,299	1,059,016	841,709	1,793,338
Buildings and improvements	218,605	235,547	178,910	379,956
Other long-term assets	80,803	124,971	43,118	112,055
Total long-term farm assets	1,460,707	1,419,535	1,063,737	2,285,348
Total Farm Assets	3,494,851	4,009,089	2,459,363	5,371,629
Total Nonfarm Assets	294,636	204,741	291,949	419,744
Total Assets	3,789,488	4,213,830	2,751,312	5,791,374
Liabilities				
Current Farm Liabilities				
Accrued interest	14,993	24,503	12,905	14,494
Accounts payable	26,801	30,132	21,440	35,789
Current notes	294,142	482,778	245,746	289,655
Government crop loans	7,301	20,734	10,216	3,214
Principal due on term debt	91,029	123,914	62,409	128,642
Total current farm liabilities	434,265	682,061	352,716	471,794
Total intermediate farm liabs	209,080	311,436	157,673	266,652
Total long term farm liabilities	373,106	429,250	275,054	541,234
Total farm liabilities	1,016,451	1,422,747	785,442	1,279,680
Total nonfarm liabilities	65,455	65,525	83,976	67,100
Total liabs excluding deferreds	1,081,907	1,488,272	869,418	1,346,780
Total deferred liabilities	301,589	351,780	209,940	477,040
Total liabilities	1,383,496	1,840,052	1,079,359	1,823,819
Retained earnings	1,876,917	1,941,577	1,308,152	3,149,475
Market valuation equity	529,074	432,201	363,802	818,080
Net worth (farm and nonfarm)	2,405,992	2,373,778	1,671,953	3,967,554
Net worth excluding deferreds	2,707,581	2,725,558	1,881,894	4,444,594
Net worth change	28,645	-220,441	66,063	113,184
Percent net worth change	1 %	-8 %	4 %	3 %
Ratio Analysis				
Current farm liabilities / assets	51 %	68 %	62 %	33 %
Intermediate farm liab. / assets	18 %	20 %	19 %	16 %
Long term farm liab. / assets	26 %	30 %	26 %	24 %
Total debt to asset ratio	37 %	44 %	39 %	31 %
Debt to assets excl deferreds	29 %	35 %	32 %	23 %

Statement Of Cash Flows
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Beginning cash (farm & nonfarm)	54,090	36,363	48,436	118,214
Cash Provided By Operating Activities				
Gross cash farm income	1,122,746	1,468,565	796,254	1,666,815
Total cash farm expense	-806,992	-1,164,300	-567,371	-1,125,231
Net cash from hedging transactions	2,284	-1,681	366	13,714
Cash provided by operating	318,038	302,584	229,248	555,298
Cash Provided By Investing Activities				
Sale of breeding livestock	-	-	-	-
Sale of machinery & equipment	11,665	9,784	5,561	28,005
Sale of titled vehicles	372	-	449	377
Sale of farm land	1,903	-	-	-
Sale of farm buildings	171	650	-	-
Sale of other farm assets	3,499	3,217	3,514	10,758
Sale of nonfarm assets	2,210	65	450	1,249
Purchase of breeding livestock	-21	-	-53	-53
Purchase of machinery & equip.	-163,947	-205,827	-108,482	-235,544
Purchase of titled vehicles	-9,837	-7,671	-8,549	-17,562
Purchase of farm land	-51,925	-25,750	-17,067	-82,671
Purchase of farm buildings	-32,840	-16,882	-28,141	-85,071
Purchase of other farm assets	-14,386	-24,029	-8,972	-17,945
Purchase of nonfarm assets	-29,137	-17,416	-33,314	-43,769
Cash provided by investing	-282,274	-283,859	-194,605	-442,229
Cash Provided By Financing Activities				
Money borrowed	562,834	858,138	351,986	759,516
Principal payments	-475,679	-739,931	-319,892	-673,701
Personal income	22,187	14,749	20,852	31,853
Family living/owner withdrawals	-89,691	-117,295	-64,300	-124,556
Income and social security tax	-40,923	-35,550	-27,954	-71,961
Capital contributions	-	-	-	-
Capital distributions	-2,724	-998	-1,064	-2,243
Dividends paid	-3,654	-2,283	-	-
Cash gifts and inheritances	746	130	1,396	-
Gifts given	-1,506	-38	-483	-6,859
Other cash flows	-	-	-	-
Cash provided by financing	-28,410	-23,077	-39,458	-87,950
Net change in cash balance	7,354	-4,352	-4,815	25,119
Ending cash (farm & nonfarm)	61,443	32,012	43,621	143,333

Financial Standards Measures
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Liquidity				
Current ratio	1.97	1.46	1.63	3.06
Working capital	420,957	315,601	220,611	972,377
Working capital to gross inc	43.3 %	27.1 %	31.1 %	63.6 %
Solvency (market)				
Farm debt to asset ratio	31 %	36 %	33 %	26 %
Farm equity to asset ratio	69 %	64 %	67 %	74 %
Farm debt to equity ratio	0.44	0.56	0.49	0.35
Profitability (cost)				
Rate of return on farm assets	0.7 %	-6.6 %	1.6 %	5.2 %
Rate of return on farm equity	-0.9 %	-13.3 %	0.3 %	6.1 %
Operating profit margin	1.8 %	-18.8 %	4.2 %	14.2 %
Net farm income	61,749	-164,215	61,080	279,501
EBITDA	168,800	-17,298	138,929	422,708
Repayment Capacity				
Capital debt repayment capacity	44,711	-175,411	57,328	243,638
Capital debt repayment margin	-73,455	-353,205	-28,073	84,325
Replacement margin	-102,369	-387,972	-44,312	44,793
Term debt coverage ratio	0.38	-0.99	0.67	1.53
Replacement coverage ratio	0.30	-0.83	0.56	1.23
Efficiency				
Asset turnover rate (cost)	35.8 %	34.8 %	36.8 %	36.9 %
Operating expense ratio	82.6 %	101.5 %	80.4 %	72.3 %
Depreciation expense ratio	7.7 %	8.7 %	7.2 %	6.7 %
Interest expense ratio	3.4 %	4.0 %	3.7 %	2.7 %
Net farm income ratio	6.3 %	-14.1 %	8.6 %	18.3 %

Crop Production and Marketing Summary
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Acreage Summary				
Total acres owned	407	372	335	700
Total crop acres	1,659	2,160	1,233	2,340
Crop acres owned	392	371	316	640
Crop acres cash rented	1,219	1,743	862	1,655
Crop acres share rented	48	46	54	45
Total pasture acres	1	-	-	-
Percent crop acres owned	24 %	17 %	26 %	27 %
Average Price Received (Cash Sales Only)				
Soybeans per bushel	13.44	13.51	12.90	13.56
Corn per bushel	6.06	5.97	5.98	6.48
Wheat, Spring per bushel	7.61	7.58	7.58	7.73
Beans, Pinto per cwt	32.07	-	-	-
Average Yield Per Acre				
Soybeans (bushel)	34.30	32.44	34.48	35.71
Corn (bushel)	131.72	125.35	134.76	133.01
Sugar Beets (ton)	24.92	24.19	25.35	25.43
Wheat, Spring (bushel)	67.90	65.36	67.88	69.47
Soybeans, Food (bushel)	28.34	-	-	29.19
Beans, Pinto (cwt)	19.56	-	-	-

Operator and Labor Information
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Operator Information				
Average number of operators	1.1	1.3	1.0	1.2
Average age of operators	45.9	47.8	43.0	48.9
Average number of years farming	21.9	23.9	18.3	26.6
Results Per Operator				
Working capital	383,791	239,171	229,498	787,960
Total assets (market)	3,454,921	3,193,347	2,862,144	4,693,010
Total liabilities	1,261,350	1,394,438	1,122,839	1,477,923
Net worth (market)	2,193,571	1,798,909	1,739,305	3,215,087
Net worth excl deferred liabs	2,468,534	2,065,497	1,957,703	3,601,654
Gross farm income	886,955	882,061	738,403	1,238,309
Total farm expense	831,157	1,006,507	674,862	1,012,421
Net farm income from operations	55,798	-124,446	63,541	225,889
Net nonfarm income	20,228	11,177	21,692	25,812
Family living & tax withdrawals	121,337	115,559	95,015	156,573
Total acres owned	371.3	281.7	348.5	567.6
Total crop acres	1,512.7	1,636.9	1,282.5	1,896.5
Crop acres owned	357.7	281.1	329.0	518.3
Crop acres cash rented	1,111.3	1,321.0	896.8	1,341.5
Crop acres share rented	43.7	34.8	56.7	36.7
Total pasture acres	1.2	-	-	-
Labor Analysis				
Number of farms	233	46	47	47
Total unpaid labor hours	1,824	2,084	1,636	2,302
Total hired labor hours	1,714	2,798	1,029	2,485
Total labor hours per farm	3,538	4,882	2,664	4,788
Unpaid hours per operator	1,662	1,580	1,702	1,866

Nonfarm Summary
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	46	47	47
Nonfarm Income				
Personal wages & salary	15,867	8,657	15,698	20,066
Net nonfarm business income	1,838	5,847	612	1,440
Personal rental income	320	174	322	319
Personal interest income	111	18	166	160
Personal cash dividends	358	-	0	1,756
Tax refunds	439	49	272	255
Other nonfarm income	3,254	5	3,782	7,858
Total nonfarm income	22,187	14,749	20,852	31,853
Gifts and inheritances	746	130	1,396	-

Financial Summary
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Gross Farm Income)

	<u>Avg. Of</u> <u>All Farms</u>	<u>Less than</u> <u>100,000</u>	<u>100,001 -</u> <u>250,000</u>	<u>250,001 -</u> <u>500,000</u>	<u>500,001 -</u> <u>1,000,000</u>	<u>1,000,001-</u> <u>2,000,000</u>	<u>Over</u> <u>2,000,000</u>
Number of farms	234	6	20	32	64	80	32
Income Statement							
Gross cash farm income	1,122,746	68,115	185,784	381,860	728,635	1,387,980	2,772,117
Total cash farm expense	806,992	48,854	146,963	277,670	537,134	963,682	2,038,972
Net cash farm income	315,755	19,262	38,821	104,190	191,501	424,298	733,145
Inventory change	-179,658	19,964	2,907	-28,109	-96,968	-237,137	-504,422
Depreciation	-74,895	-1,156	-9,821	-20,277	-50,574	-93,424	-186,331
Net farm income from operations	61,202	38,070	31,907	55,804	43,959	93,737	42,392
Gain or loss on capital sales	547	-	-	-	114	1,072	1,094
Average net farm income	61,749	38,070	31,907	55,804	44,073	94,809	43,485
Median net farm income	61,939	16,759	29,030	46,756	56,861	92,232	107,124
Profitability (cost)							
Rate of return on assets	0.7 %	20.3 %	3.6 %	3.4 %	0.7 %	1.2 %	-0.6 %
Rate of return on equity	-0.9 %	39.7 %	3.2 %	3.2 %	-1.1 %	0.1 %	-3.0 %
Operating profit margin	1.8 %	36.0 %	8.7 %	8.8 %	2.0 %	3.2 %	-1.8 %
Asset turnover rate	35.8 %	56.5 %	41.2 %	38.7 %	36.3 %	35.8 %	34.9 %
Liquidity & Repayment (end of year)							
Current assets	855,222	87,322	131,915	293,942	547,267	1,074,234	2,080,933
Current liabilities	434,265	33,312	75,422	164,237	315,366	484,396	1,116,222
Current ratio	1.97	2.62	1.75	1.79	1.74	2.22	1.86
Working capital	420,957	54,010	56,493	129,705	231,900	589,838	964,711
Working capital to gross inc	43.3 %	60.0 %	29.8 %	34.5 %	35.6 %	49.6 %	41.5 %
Term debt coverage ratio	0.38	7.91	1.56	0.92	0.44	0.53	0.09
Replacement coverage ratio	0.30	6.52	1.11	0.74	0.34	0.40	0.08
Solvency (end of year at market)							
Number of farms	234	6	20	32	64	80	32
Total farm assets	3,494,851	214,400	706,829	1,372,927	2,467,984	4,191,158	8,287,343
Total farm liabilities	1,068,746	110,716	191,870	479,474	771,148	1,164,074	2,742,570
Total assets	3,789,488	357,844	848,410	1,555,115	2,704,195	4,557,414	8,756,237
Total liabilities	1,383,496	230,880	280,750	619,756	1,020,821	1,482,845	3,529,546
Net worth	2,405,992	126,964	567,661	935,359	1,683,374	3,074,569	5,226,691
Net worth change	28,645	33,613	23,254	60,512	24,200	83,207	-128,300
Farm debt to asset ratio	31 %	52 %	27 %	35 %	31 %	28 %	33 %
Total debt to asset ratio	37 %	65 %	33 %	40 %	38 %	33 %	40 %
Nonfarm Information							
Net nonfarm income	22,187	37,813	31,739	28,722	26,405	16,764	11,874
Crop Acres							
Total acres owned	407	13	109	191	361	533	663
Total crop acres	1,659	96	358	721	1,244	2,050	3,556
Total crop acres owned	392	20	95	189	345	518	632
Total crop acres cash rented	1,219	76	230	478	856	1,477	2,871
Total crop acres share rented	48	-	34	55	43	54	53

Financial Summary
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(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	234	26	49	51	81	27
Income Statement						
Gross cash farm income	1,122,746	432,835	937,266	1,145,098	1,427,666	1,166,739
Total cash farm expense	806,992	337,419	725,786	843,608	978,456	822,988
Net cash farm income	315,755	95,416	211,480	301,490	449,210	343,752
Inventory change	-179,658	-12,673	-128,553	-164,529	-267,613	-197,917
Depreciation	-74,895	-19,344	-49,534	-80,084	-102,029	-83,214
Net farm income from operations	61,202	63,398	33,393	56,877	79,568	62,621
Gain or loss on capital sales	547	-	-	-	1,581	-
Average net farm income	61,749	63,398	33,393	56,877	81,150	62,621
Median net farm income	61,939	57,653	43,245	78,001	89,407	64,435
Profitability (cost)						
Rate of return on assets	0.7 %	5.1 %	0.1 %	0.7 %	0.7 %	0.1 %
Rate of return on equity	-0.9 %	7.0 %	-2.4 %	-1.3 %	-0.6 %	-0.9 %
Operating profit margin	1.8 %	8.5 %	0.2 %	1.9 %	2.0 %	0.5 %
Asset turnover rate	35.8 %	59.6 %	40.1 %	38.4 %	32.9 %	31.0 %
Liquidity & Repayment (end of year)						
Current assets	855,222	296,552	653,151	872,071	1,088,172	1,029,248
Current liabilities	434,265	184,773	349,907	512,824	510,273	451,200
Current ratio	1.97	1.60	1.87	1.70	2.13	2.28
Working capital	420,957	111,779	303,244	359,247	577,899	578,048
Working capital to gross inc	43.3 %	24.9 %	36.4 %	34.9 %	48.7 %	58.9 %
Term debt coverage ratio	0.38	1.21	0.16	0.26	0.57	0.08
Replacement coverage ratio	0.30	1.15	0.14	0.22	0.44	0.06
Solvency (end of year at market)						
Number of farms	234	26	49	51	81	27
Total farm assets	3,494,851	859,863	2,491,302	3,530,940	4,714,859	4,125,314
Total farm liabilities	1,068,746	448,351	879,393	1,318,941	1,273,386	923,290
Total assets	3,789,488	956,136	2,682,924	3,840,758	5,113,970	4,455,818
Total liabilities	1,383,496	519,488	1,155,027	1,687,711	1,642,392	1,278,818
Net worth	2,405,992	436,648	1,527,898	2,153,047	3,471,578	3,176,999
Net worth change	28,645	26,240	-624	7,123	62,296	23,781
Farm debt to asset ratio	31 %	52 %	35 %	37 %	27 %	22 %
Total debt to asset ratio	37 %	54 %	43 %	44 %	32 %	29 %
Nonfarm Information						
Net nonfarm income	22,187	22,072	26,697	11,478	28,834	14,398
Crop Acres						
Total acres owned	407	66	235	343	610	563
Total crop acres	1,659	693	1,385	1,860	1,981	1,743
Total crop acres owned	392	61	211	385	581	488
Total crop acres cash rented	1,219	605	1,140	1,409	1,359	1,174
Total crop acres share rented	48	26	34	66	41	81

Financial Summary
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By County)

	Avg. Of All Farms	Clay	Kittson	Mahnomen	Marshall	Norman	Polk	Wilkin	Cass	Richland
Number of farms	234	34	5	5	7	31	34	44	19	40
Income Statement										
Gross cash farm income	1,122,746	1,123,928	1,324,004	1,399,524	695,100	1,247,182	1,520,653	980,873	782,491	1,071,452
Total cash farm expense	806,992	831,280	1,114,593	960,416	491,249	971,860	1,131,573	666,939	531,611	730,528
Net cash farm income	315,755	292,648	209,412	439,108	203,851	275,322	389,080	313,934	250,880	340,924
Inventory change	-179,658	-178,326	149,543	-30,836	-43,749	-140,242	-277,320	-197,953	-119,874	-211,646
Depreciation	-74,895	-68,947	-84,412	-108,118	-55,188	-90,871	-114,110	-62,014	-55,507	-66,404
Net farm income from operations	61,202	45,375	274,543	300,153	104,913	44,209	-2,350	53,966	75,499	62,874
Gain or loss on capital sales	547	1,029	-	-	-	-	-	1,950	-	-
Average net farm income	61,749	46,405	274,543	300,153	104,913	44,209	-2,350	55,916	75,499	62,874
Median net farm income	61,939	48,984	240,288	192,519	90,977	52,859	22,532	57,389	80,971	65,004
Profitability (cost)										
Rate of return on assets	0.7 %	-0.1 %	7.7 %	7.0 %	3.7 %	0.5 %	-1.5 %	0.6 %	2.5 %	0.2 %
Rate of return on equity	-0.9 %	-2.1 %	8.7 %	9.7 %	3.8 %	-1.8 %	-3.8 %	-1.1 %	2.2 %	-1.1 %
Operating profit margin	1.8 %	-0.1 %	16.0 %	17.7 %	12.0 %	1.4 %	-4.5 %	1.8 %	5.9 %	0.6 %
Asset turnover rate	35.8 %	40.2 %	47.8 %	39.4 %	30.8 %	35.8 %	32.7 %	34.2 %	41.2 %	34.8 %
Liquidity & Repayment (end of year)										
Current assets	855,222	731,475	902,017	1,370,736	704,031	1,008,401	1,315,712	591,054	662,653	833,692
Current liabilities	434,265	396,152	358,087	544,696	257,696	690,543	725,098	295,094	243,683	336,172
Current ratio	1.97	1.85	2.52	2.52	2.73	1.46	1.81	2.00	2.72	2.48
Working capital	420,957	335,323	543,930	826,040	446,335	317,858	590,614	295,960	418,970	497,521
Working capital to gross inc	43.3 %	34.0 %	35.8 %	60.0 %	69.9 %	27.1 %	45.9 %	36.5 %	60.1 %	57.8 %
Term debt coverage ratio	0.38	-0.12	2.83	2.17	1.76	0.36	-0.17	0.27	0.97	0.60
Replacement coverage ratio	0.30	-0.09	2.14	1.95	0.98	0.31	-0.15	0.20	0.76	0.45
Solvency (end of year at market)										
Number of farms	234	34	5	5	7	31	34	44	19	40
Total farm assets	3,494,851	3,545,473	4,204,328	4,167,880	3,269,224	4,574,914	4,404,026	3,015,092	2,370,045	3,106,614
Total farm liabilities	1,068,746	1,010,252	1,605,915	1,555,122	1,111,485	1,522,956	1,501,316	833,318	523,101	846,113
Total assets	3,789,488	3,865,600	4,408,973	4,626,005	3,497,356	4,993,298	4,630,657	3,320,178	2,634,362	3,366,258
Total liabilities	1,383,496	1,502,002	1,921,278	1,629,858	1,351,257	2,126,378	2,050,106	931,435	807,196	954,684
Net worth	2,405,992	2,363,597	2,487,694	2,996,147	2,146,099	2,866,920	2,580,551	2,388,742	1,827,166	2,411,575
Net worth change	28,645	-68,061	292,533	127,553	116,197	31,279	-113,697	151,080	57,507	7,720
Farm debt to asset ratio	31 %	28 %	38 %	37 %	34 %	33 %	34 %	28 %	22 %	27 %
Total debt to asset ratio	37 %	39 %	44 %	35 %	39 %	43 %	44 %	28 %	31 %	28 %
Nonfarm Information										
Net nonfarm income	22,187	22,346	13,084	36,069	13,573	16,919	10,395	25,571	23,231	27,268
Crop Acres										
Total acres owned	407	279	898	501	430	564	484	414	270	331
Total crop acres	1,659	1,634	1,644	2,439	1,510	2,157	2,231	1,251	1,375	1,427
Total crop acres owned	392	293	727	691	563	511	446	389	214	354
Total crop acres cash rented	1,219	1,308	896	1,748	947	1,582	1,746	806	1,152	989
Total crop acres share rented	48	33	20	-	-	63	39	56	8	84

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 operator's 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.

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.

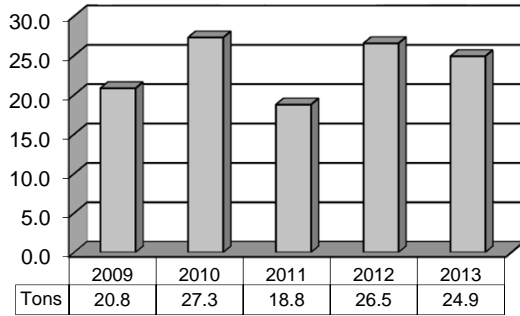
"Total direct expense per unit" and "Total dir & ovhd exp per unit" are calculated by dividing "Total direct expense per acre" and "Total dir & ovhd expenses per acre," respectively, by "Yield per acre." "With labor & management" is the breakeven yield after direct, overhead and a labor and management 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.

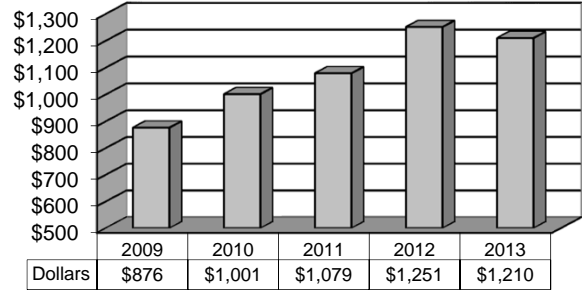
Rounding of individual items for the report may have caused minor discrepancies with the calculated totals.

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

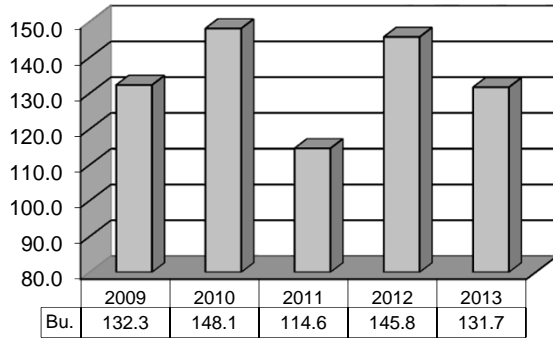
Sugar Beet Yields



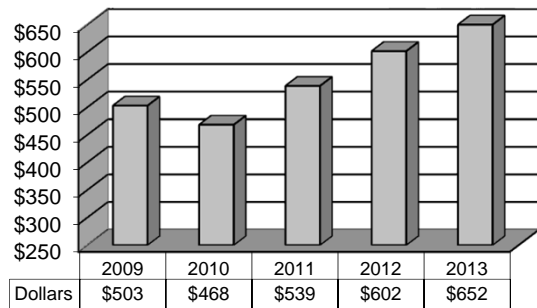
**Sugar Beet Total Listed Cost
(cash rented land)**



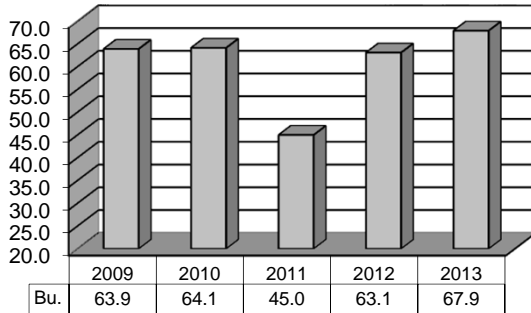
Corn Yields



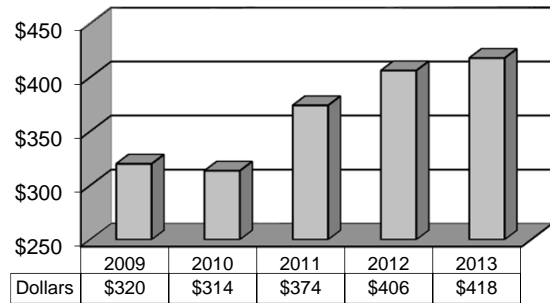
**Corn Total Listed Cost
(cash rented land)**



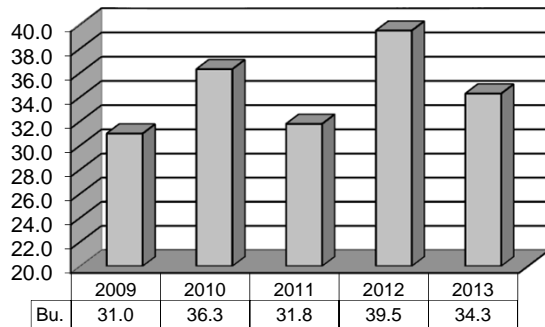
Spring Wheat Yields



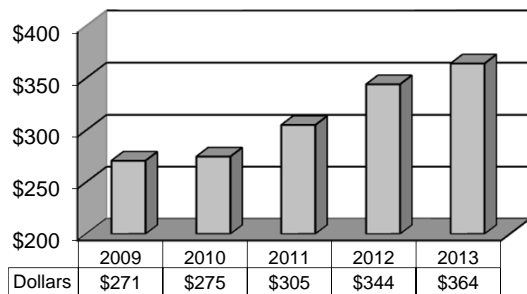
**Spring Wheat Total Listed Cost
(cash rented land)**



Soybeans Yields



**Soybeans Total Listed Cost
(cash rented land)**



Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

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 fields	115	19	23	27
Number of farms	96	19	19	20
Acres	204.68	227.63	185.81	200.59
Yield per acre (bu.)	131.52	121.11	134.49	130.83
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.05	3.88	3.96	4.43
Total product return per acre	532.23	470.31	532.35	579.37
Hedging gains/losses per acre	1.09	-	-	-
Crop insurance per acre	42.52	34.14	31.08	83.92
Other crop income per acre	0.05	0.29	-	-
Gross return per acre	575.89	504.73	563.43	663.29
Direct Expenses				
Seed	100.56	106.44	105.16	96.50
Fertilizer	160.44	175.41	153.96	146.94
Crop chemicals	27.29	37.07	24.91	22.42
Crop insurance	29.33	37.06	22.11	27.30
Drying expense	17.36	25.38	12.79	23.24
Fuel & oil	32.92	39.36	35.24	31.25
Repairs	41.28	50.72	44.19	33.86
Custom hire	5.40	7.40	5.18	6.21
Hired labor	2.52	3.52	1.52	0.69
Machinery leases	1.02	1.77	0.71	-
Operating interest	5.36	7.69	5.97	2.70
Miscellaneous	1.86	2.58	1.28	0.41
Total direct expenses per acre	425.34	494.39	413.02	391.52
Return over direct exp per acre	150.55	10.34	150.41	271.77
Overhead Expenses				
Custom hire	2.65	-	1.12	0.41
Hired labor	19.63	27.36	18.29	18.52
Machinery leases	2.93	2.45	5.39	1.55
Building leases	0.70	0.37	0.07	0.05
RE & pers. property taxes	19.89	22.47	19.00	18.08
Farm insurance	8.44	10.13	8.56	9.22
Utilities	6.11	7.01	6.70	5.36
Dues & professional fees	5.23	8.67	3.99	4.78
Interest	44.06	65.34	44.84	36.54
Mach & bldg depreciation	54.00	58.45	52.26	53.50
Miscellaneous	6.79	9.59	8.30	2.68
Total overhead expenses per acre	170.42	211.83	168.53	150.70
Total dir & ovhd expenses per acre	595.76	706.23	581.55	542.22
Net return per acre	-19.86	-201.50	-18.12	121.07
Government payments	11.85	12.62	11.45	11.06
Net return with govt pmts	-8.01	-188.88	-6.67	132.13
Labor & management charge	49.50	49.52	54.60	50.33
Net return over lbr & mgt	-57.52	-238.40	-61.27	81.80
Cost of Production				
Total direct expense per bu.	3.23	4.08	3.07	2.99
Total dir & ovhd exp per bu.	4.53	5.83	4.32	4.14
Less govt & other income	4.11	5.44	4.01	3.42
With labor & management	4.48	5.85	4.41	3.80
Net value per unit	4.05	3.88	3.96	4.43
Machinery cost per acre	141.64	163.40	146.41	127.99
Est. labor hours per acre	2.21	2.53	2.20	1.99

Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

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 fields	196	32	33	47
Number of farms	139	27	28	28
Acres	351.74	303.82	349.00	311.27
Yield per acre (bu.)	131.45	126.02	132.18	133.57
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.10	3.84	3.95	4.45
Total product return per acre	538.77	483.70	521.57	594.68
Hedging gains/losses per acre	7.80	-	-	29.96
Crop insurance per acre	43.13	18.67	44.32	47.54
Other crop income per acre	0.57	-	-	2.60
Gross return per acre	590.27	502.37	565.89	674.79
Direct Expenses				
Seed	101.54	111.46	101.40	94.07
Fertilizer	157.21	161.79	163.90	146.07
Crop chemicals	25.23	27.59	26.81	20.65
Crop insurance	29.25	33.45	23.86	29.69
Drying expense	19.28	24.46	14.62	17.45
Storage	0.62	0.07	0.38	1.81
Fuel & oil	32.19	38.93	33.03	27.66
Repairs	40.43	57.21	38.79	36.07
Custom hire	6.80	8.40	5.99	2.12
Hired labor	2.40	2.70	2.24	0.67
Land rent	123.48	128.55	112.72	123.44
Machinery leases	1.09	1.70	0.84	-
Operating interest	5.77	8.11	7.16	4.37
Miscellaneous	1.88	2.21	1.69	0.76
Total direct expenses per acre	547.17	606.61	533.44	504.82
Return over direct exp per acre	43.10	-104.24	32.45	169.97
Overhead Expenses				
Custom hire	1.00	-	0.28	1.51
Hired labor	19.07	26.14	13.27	13.30
Machinery leases	4.69	3.13	4.25	5.54
Building leases	1.25	2.60	0.16	2.51
Farm insurance	7.95	10.63	7.64	6.19
Utilities	5.56	8.49	5.35	5.51
Dues & professional fees	4.58	6.07	3.67	3.75
Interest	6.33	6.38	5.44	4.31
Mach & bldg depreciation	49.91	53.74	55.07	40.35
Miscellaneous	4.80	8.13	8.06	2.38
Total overhead expenses per acre	105.14	125.32	103.20	85.36
Total dir & ovhd expenses per acre	652.31	731.94	636.64	590.18
Net return per acre	-62.04	-229.56	-70.75	84.61
Government payments	11.81	12.52	11.19	13.17
Net return with govt pmts	-50.23	-217.04	-59.56	97.77
Labor & management charge	51.01	48.42	53.22	51.23
Net return over lbr & mgt	-101.23	-265.46	-112.78	46.55
Cost of Production				
Total direct expense per bu.	4.16	4.81	4.04	3.78
Total dir & ovhd exp per bu.	4.96	5.81	4.82	4.42
Less govt & other income	4.48	5.56	4.40	3.72
With labor & management	4.87	5.94	4.80	4.10
Net value per unit	4.16	3.84	3.95	4.68
Machinery cost per acre	139.24	164.09	141.43	114.29
Est. labor hours per acre	2.22	2.83	2.08	2.09

Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

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 fields	145	29	30	27
Number of farms	120	24	24	24
Acres	219.55	224.74	224.92	141.19
Yield per acre (bu.)	34.15	29.70	34.10	38.13
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	12.53	12.49	12.62	12.65
Total product return per acre	428.03	370.85	430.57	482.55
Hedging gains/losses per acre	0.05	-	0.26	-
Crop insurance per acre	13.07	15.79	7.92	36.07
Other crop income per acre	0.59	1.89	-	1.63
Gross return per acre	441.74	388.52	438.74	520.25
Direct Expenses				
Seed	66.64	66.89	64.30	64.96
Fertilizer	16.04	32.47	8.67	13.31
Crop chemicals	20.98	21.48	27.53	20.56
Crop insurance	25.02	24.41	26.18	25.59
Fuel & oil	19.18	21.03	17.55	18.24
Repairs	23.86	28.22	22.91	20.55
Custom hire	3.07	2.82	4.18	4.93
Hired labor	1.42	0.13	0.41	0.88
Machinery leases	0.57	1.43	0.12	0.45
Operating interest	2.85	4.47	2.01	2.36
Miscellaneous	1.66	3.75	0.85	1.73
Total direct expenses per acre	181.30	207.09	174.70	173.56
Return over direct exp per acre	260.44	181.44	264.04	346.69
Overhead Expenses				
Custom hire	1.23	0.42	3.55	1.66
Hired labor	11.82	10.50	11.98	7.42
Machinery leases	2.59	1.13	4.32	3.24
Building leases	0.55	1.47	0.14	0.34
RE & pers. property taxes	18.93	17.92	19.93	21.13
Farm insurance	6.88	8.40	6.86	6.04
Utilities	4.34	4.08	4.39	4.02
Dues & professional fees	4.03	4.74	3.15	2.61
Interest	33.93	33.96	30.17	23.86
Mach & bldg depreciation	31.95	34.66	32.47	24.74
Miscellaneous	4.74	8.33	5.05	4.26
Total overhead expenses per acre	121.00	125.63	122.02	99.33
Total dir & ovhd expenses per acre	302.30	332.71	296.72	272.88
Net return per acre	139.44	55.81	142.02	247.36
Government payments	12.10	14.43	11.40	12.70
Net return with govt pmts	151.55	70.24	153.42	260.06
Labor & management charge	29.54	28.06	30.28	30.11
Net return over lbr & mgt	122.00	42.19	123.14	229.95
Cost of Production				
Total direct expense per bu.	5.31	6.97	5.12	4.55
Total dir & ovhd exp per bu.	8.85	11.20	8.70	7.16
Less govt & other income	8.10	10.12	8.13	5.83
With labor & management	8.96	11.07	9.01	6.62
Net value per unit	12.53	12.49	12.63	12.65
Machinery cost per acre	83.26	91.01	85.65	74.48
Est. labor hours per acre	1.36	1.44	1.30	1.23

Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

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 fields	245	49	48	38
Number of farms	175	35	35	35
Acres	392.05	374.58	387.41	435.76
Yield per acre (bu.)	34.30	29.00	35.09	39.55
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	12.53	12.45	12.41	12.81
Total product return per acre	429.94	360.98	435.51	506.64
Hedging gains/losses per acre	-0.05	-	-	-
Crop insurance per acre	12.95	24.55	6.84	6.81
Other crop income per acre	0.49	0.04	-	0.63
Gross return per acre	443.34	385.57	442.36	514.09
Direct Expenses				
Seed	66.46	63.15	69.81	65.56
Fertilizer	15.32	18.37	16.74	11.95
Crop chemicals	20.27	19.81	17.60	18.02
Crop insurance	24.72	23.88	24.91	21.31
Fuel & oil	19.03	20.40	20.09	17.94
Repairs	24.27	29.45	26.75	19.11
Custom hire	3.76	4.19	3.83	3.80
Hired labor	1.25	2.45	0.85	1.00
Land rent	116.71	134.63	114.54	99.91
Machinery leases	1.48	1.11	2.80	2.22
Operating interest	3.22	3.86	3.54	4.02
Miscellaneous	2.40	2.34	2.56	1.79
Total direct expenses per acre	298.90	323.63	303.99	266.63
Return over direct exp per acre	144.44	61.94	138.37	247.46
Overhead Expenses				
Custom hire	0.36	0.50	0.74	0.32
Hired labor	10.83	14.66	9.85	8.98
Machinery leases	3.02	4.46	3.35	2.97
Building leases	0.59	1.03	0.28	0.86
Farm insurance	6.44	8.51	5.64	5.69
Utilities	3.99	4.78	4.44	3.56
Dues & professional fees	3.56	5.60	2.88	2.73
Interest	3.58	3.79	5.36	4.59
Mach & bldg depreciation	29.21	33.79	28.29	26.53
Miscellaneous	3.87	7.65	2.31	2.46
Total overhead expenses per acre	65.45	84.78	63.16	58.70
Total dir & ovhd expenses per acre	364.35	408.41	367.14	325.33
Net return per acre	78.99	-22.84	75.21	188.75
Government payments	12.11	11.82	11.80	13.63
Net return with govt pmts	91.10	-11.02	87.01	202.38
Labor & management charge	30.57	30.99	28.81	31.66
Net return over lbr & mgt	60.53	-42.00	58.20	170.72
Cost of Production				
Total direct expense per bu.	8.71	11.16	8.66	6.74
Total dir & ovhd exp per bu.	10.62	14.08	10.46	8.23
Less govt & other income	9.88	12.83	9.93	7.69
With labor & management	10.77	13.90	10.75	8.49
Net value per unit	12.53	12.45	12.41	12.81
Machinery cost per acre	82.69	95.29	89.21	76.22
Est. labor hours per acre	1.39	1.68	1.35	1.30

Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

Soybeans, Food on Cash Rent

	Avg. Of All Farms
Number of fields	6
Number of farms	6
Acres	337.73
Yield per acre (bu.)	26.94
Operators share of yield %	100.00
Value per bu.	15.83
Total product return per acre	426.45
Crop insurance per acre	8.48
Other crop income per acre	7.40
Gross return per acre	442.34
Direct Expenses	
Seed	29.80
Fertilizer	16.32
Crop chemicals	39.43
Crop insurance	20.63
Fuel & oil	19.75
Repairs	20.04
Custom hire	10.08
Hired labor	0.35
Land rent	129.89
Operating interest	1.73
Miscellaneous	2.63
Total direct expenses per acre	290.66
Return over direct exp per acre	151.68
Overhead Expenses	
Hired labor	5.67
Machinery leases	0.93
Building leases	1.42
Farm insurance	5.51
Utilities	4.32
Dues & professional fees	5.71
Interest	3.01
Mach & bldg depreciation	28.56
Miscellaneous	0.78
Total overhead expenses per acre	55.89
Total dir & ovhd expenses per acre	346.55
Net return per acre	95.79
Government payments	12.35
Net return with govt pmts	108.14
Labor & management charge	30.44
Net return over lbr & mgt	77.70
Cost of Production	
Total direct expense per bu.	10.79
Total dir & ovhd exp per bu.	12.87
Less govt & other income	11.82
With labor & management	12.95
Net value per unit	15.83
Machinery cost per acre	81.53
Est. labor hours per acre	1.05

Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

Sugar Beets on Owned Land Excluding Joint venture

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	38	10	6	6
Number of farms	27	5	6	6
Acres	127.66	138.42	146.65	102.93
Yield per acre (ton)	24.51	23.12	25.86	28.05
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	35.30	32.94	36.27	38.94
Total product return per acre	865.04	761.82	937.68	1,092.41
Crop insurance per acre	10.34	-	22.63	-
Other crop income per acre	5.85	-	-	19.77
Gross return per acre	881.23	761.82	960.31	1,112.18
Direct Expenses				
Seed	190.29	203.68	190.43	189.76
Fertilizer	118.08	95.78	106.45	134.47
Crop chemicals	91.07	104.82	122.33	92.84
Crop insurance	28.95	31.99	21.11	18.03
Fuel & oil	89.85	107.23	96.29	67.52
Repairs	115.69	154.33	95.18	123.36
Custom hire	13.87	29.45	4.40	21.89
Hired labor	26.98	28.04	33.00	13.27
Hauling and trucking	17.30	16.64	17.88	26.17
Operating interest	9.21	10.20	8.35	7.29
Miscellaneous	6.40	11.55	5.47	6.34
Total direct expenses per acre	707.71	793.70	700.89	700.93
Return over direct exp per acre	173.52	-31.88	259.42	411.25
Overhead Expenses				
Custom hire	0.70	-	-	2.42
Hired labor	53.35	30.70	76.99	43.04
Machinery leases	3.47	0.28	4.34	0.39
Building leases	1.09	0.62	2.19	1.24
RE & pers. property taxes	23.31	23.07	27.27	19.67
Farm insurance	22.86	39.48	19.56	10.44
Utilities	15.44	19.99	18.15	6.24
Dues & professional fees	8.42	13.41	7.23	3.70
Interest	40.26	20.25	54.21	34.93
Mach & bldg depreciation	139.05	168.27	132.39	96.28
Miscellaneous	9.35	16.47	4.88	7.67
Total overhead expenses per acre	317.29	332.54	347.22	226.02
Total dir & ovhd expenses per acre	1,025.00	1,126.24	1,048.11	926.95
Net return per acre	-143.78	-364.42	-87.81	185.23
Government payments	11.67	10.66	16.10	10.58
Net return with govt pmts	-132.11	-353.75	-71.70	195.81
Labor & management charge	120.07	133.46	103.78	114.41
Net return over lbr & mgt	-252.18	-487.22	-175.48	81.40
Cost of Production				
Total direct expense per ton	28.88	34.32	27.11	24.98
Total dir & ovhd exp per ton	41.82	48.70	40.54	33.04
Less govt & other income	40.69	48.24	39.04	31.96
With labor & management	45.58	54.01	43.05	36.04
Net value per unit	35.30	32.94	36.27	38.94
Machinery cost per acre	365.96	454.37	342.75	315.43
Est. labor hours per acre	5.45	5.89	5.13	4.46

Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

Sugar Beets on Owned Land Including Joint venture

	<u>Avg. Of</u> <u>All Farms</u>
Number of fields	21
Number of farms	21
Acres	134.35
Yield per acre (ton)	23.49
Operators share of yield %	100.00
Value per ton	34.77
Total product return per acre	816.74
Crop insurance per acre	37.59
Other crop income per acre	4.02
Gross return per acre	858.36
Direct Expenses	
Seed	187.81
Fertilizer	115.84
Crop chemicals	87.01
Crop insurance	32.47
Fuel & oil	82.17
Repairs	108.34
Custom hire	12.09
Hired labor	16.27
Stock/quota lease	250.80
Machinery leases	1.14
Hauling and trucking	3.24
Operating interest	15.05
Miscellaneous	1.72
Total direct expenses per acre	913.95
Return over direct exp per acre	-55.59
Overhead Expenses	
Custom hire	2.32
Hired labor	64.31
Machinery leases	13.37
Building leases	1.12
RE & pers. property taxes	19.11
Farm insurance	11.44
Utilities	9.98
Dues & professional fees	9.70
Interest	55.26
Mach & bldg depreciation	99.94
Miscellaneous	14.35
Total overhead expenses per acre	300.90
Total dir & ovhd expenses per acre	1,214.84
Net return per acre	-356.49
Government payments	12.85
Net return with govt pmts	-343.63
Labor & management charge	115.01
Net return over lbr & mgt	-458.64
Cost of Production	
Total direct expense per ton	38.91
Total dir & ovhd exp per ton	51.72
Less govt & other income	49.40
With labor & management	54.30
Net value per unit	34.77
Machinery cost per acre	322.41
Est. labor hours per acre	6.10

Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

Sugar Beets on Cash Rent 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 fields	81	17	18	13
Number of farms	52	10	11	11
Acres	140.35	154.61	149.45	96.92
Yield per acre (ton)	25.10	23.54	26.15	24.87
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	35.14	33.46	33.90	37.67
Total product return per acre	882.00	787.61	886.38	936.96
Crop insurance per acre	35.38	73.32	3.96	145.01
Other crop income per acre	5.16	-	2.24	12.95
Gross return per acre	922.54	860.93	892.58	1,094.92
Direct Expenses				
Seed	189.03	198.24	201.96	184.74
Fertilizer	112.08	116.97	104.36	121.66
Crop chemicals	89.04	104.84	81.44	72.21
Crop insurance	33.53	35.28	29.78	29.61
Fuel & oil	88.59	106.13	82.61	71.90
Repairs	119.82	148.98	102.94	121.50
Custom hire	16.92	24.90	5.04	16.25
Hired labor	31.06	33.54	17.34	26.34
Land rent	129.65	113.92	133.62	177.39
Machinery leases	0.50	-	1.15	-
Hauling and trucking	9.95	3.75	2.87	9.16
Operating interest	9.38	8.95	7.33	16.28
Miscellaneous	4.74	6.11	5.01	1.71
Total direct expenses per acre	834.32	901.61	775.47	848.76
Return over direct exp per acre	88.22	-40.68	117.11	246.17
Overhead Expenses				
Custom hire	2.53	-	0.77	1.05
Hired labor	78.17	125.67	66.86	35.49
Machinery leases	5.31	1.54	6.18	7.57
Building leases	1.99	4.86	0.91	1.30
Farm insurance	23.90	40.67	21.16	10.28
Utilities	14.31	16.87	18.02	10.34
Dues & professional fees	7.64	11.34	4.62	3.93
Interest	14.34	10.10	21.95	15.51
Mach & bldg depreciation	128.50	168.25	115.38	90.01
Miscellaneous	9.50	11.32	7.96	11.39
Total overhead expenses per acre	286.20	390.63	263.81	186.86
Total dir & ovhd expenses per acre	1,120.53	1,292.24	1,039.28	1,035.62
Net return per acre	-197.98	-431.31	-146.70	59.30
Government payments	11.38	11.32	13.27	10.95
Net return with govt pmts	-186.60	-419.99	-133.43	70.25
Labor & management charge	116.42	144.04	105.41	109.82
Net return over lbr & mgt	-303.02	-564.03	-238.84	-39.57
Cost of Production				
Total direct expense per ton	33.24	38.30	29.66	34.12
Total dir & ovhd exp per ton	44.65	54.90	39.75	41.64
Less govt & other income	42.58	51.30	39.00	34.85
With labor & management	47.22	57.42	43.04	39.26
Net value per unit	35.14	33.46	33.90	37.67
Machinery cost per acre	367.51	448.62	321.94	320.31
Est. labor hours per acre	6.84	9.43	5.26	4.53

Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

Sugar Beets on Cash Rent Including Joint venture

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	64	10	11	11
Number of farms	49	9	10	10
Acres	223.03	160.31	289.25	205.90
Yield per acre (ton)	24.62	22.96	24.36	25.59
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	35.45	33.83	35.34	38.40
Total product return per acre	873.01	776.73	860.84	982.59
Crop insurance per acre	48.17	12.89	51.12	57.65
Other crop income per acre	2.26	2.04	1.30	6.85
Gross return per acre	923.44	791.66	913.26	1,047.09
Direct Expenses				
Seed	199.54	206.30	191.80	181.71
Fertilizer	106.56	122.53	98.87	121.63
Crop chemicals	78.80	87.26	70.97	68.44
Crop insurance	34.06	33.96	33.17	35.12
Fuel & oil	82.86	95.41	80.54	90.38
Repairs	96.53	140.52	88.73	92.04
Custom hire	14.06	9.89	7.48	6.13
Hired labor	27.83	30.18	29.17	13.45
Land rent	131.89	142.00	128.15	93.26
Stock/quota lease	265.55	314.30	285.29	240.00
Machinery leases	3.57	5.65	2.20	-
Hauling and trucking	8.82	1.90	-	16.17
Operating interest	16.63	15.53	17.15	5.61
Miscellaneous	2.42	1.46	5.67	2.71
Total direct expenses per acre	1,069.12	1,206.90	1,039.18	966.65
Return over direct exp per acre	-145.68	-415.23	-125.92	80.44
Overhead Expenses				
Custom hire	0.88	-	2.05	0.55
Hired labor	50.03	83.17	54.72	33.56
Machinery leases	8.87	1.96	6.48	0.22
Building leases	3.98	3.69	8.08	-
Farm insurance	10.92	19.87	11.96	10.09
Utilities	8.94	9.64	10.67	9.71
Dues & professional fees	6.87	8.01	5.18	12.18
Interest	14.19	10.23	17.45	14.56
Mach & bldg depreciation	94.52	116.33	99.76	82.77
Miscellaneous	12.88	14.74	7.19	7.30
Total overhead expenses per acre	212.09	267.64	223.52	170.94
Total dir & ovhd expenses per acre	1,281.21	1,474.54	1,262.71	1,137.59
Net return per acre	-357.77	-682.88	-349.44	-90.50
Government payments	13.15	12.76	14.10	12.44
Net return with govt pmnts	-344.62	-670.12	-335.34	-78.06
Labor & management charge	95.30	107.43	95.10	117.72
Net return over lbr & mgt	-439.92	-777.55	-430.44	-195.78
Cost of Production				
Total direct expense per ton	43.42	52.56	42.66	37.77
Total dir & ovhd exp per ton	52.03	64.22	51.84	44.45
Less govt & other income	49.45	63.01	49.11	41.45
With labor & management	53.32	67.69	53.01	46.05
Net value per unit	35.45	33.83	35.34	38.40
Machinery cost per acre	308.67	377.15	299.78	281.30
Est. labor hours per acre	4.99	6.59	5.21	4.35

Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

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 fields	68	14	13	16
Number of farms	59	11	12	12
Acres	203.62	108.15	285.62	211.05
Yield per acre (bu.)	68.25	48.28	67.96	80.82
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.44	6.49	6.28	6.54
Total product return per acre	439.80	313.40	427.05	528.35
Crop insurance per acre	3.72	16.95	0.72	2.59
Other crop income per acre	0.93	0.49	-	3.58
Gross return per acre	444.45	330.85	427.77	534.53
Direct Expenses				
Seed	25.03	23.26	27.00	23.47
Fertilizer	106.92	122.90	102.04	105.77
Crop chemicals	29.01	15.93	30.56	37.93
Crop insurance	20.45	16.78	18.92	27.88
Drying expense	0.53	-	0.11	2.06
Fuel & oil	20.86	20.99	20.95	21.64
Repairs	25.37	29.23	23.72	26.47
Custom hire	4.65	0.29	3.93	7.19
Hired labor	4.34	1.50	11.36	-
Operating interest	2.38	2.63	3.27	1.36
Miscellaneous	3.61	1.08	3.14	4.72
Total direct expenses per acre	243.13	234.58	245.02	258.49
Return over direct exp per acre	201.32	96.26	182.75	276.04
Overhead Expenses				
Hired labor	9.60	12.20	6.71	11.06
Machinery leases	1.33	2.71	0.12	2.87
Building leases	0.44	0.02	0.01	1.15
RE & pers. property taxes	17.51	16.37	17.47	15.78
Farm insurance	7.55	10.28	5.82	7.27
Utilities	5.03	6.75	5.24	4.93
Dues & professional fees	3.31	3.95	2.66	2.79
Interest	26.67	34.98	29.96	16.52
Mach & bldg depreciation	33.72	35.85	32.11	36.86
Miscellaneous	4.46	4.70	3.84	5.10
Total overhead expenses per acre	109.64	127.82	103.93	104.32
Total dir & ovhd expenses per acre	352.78	362.40	348.96	362.81
Net return per acre	91.68	-31.56	78.82	171.72
Government payments	12.58	12.71	11.96	13.59
Net return with govt pmts	104.26	-18.85	90.77	185.31
Labor & management charge	28.62	27.96	26.82	32.80
Net return over lbr & mgt	75.65	-46.81	63.95	152.51
Cost of Production				
Total direct expense per bu.	3.56	4.86	3.61	3.20
Total dir & ovhd exp per bu.	5.17	7.51	5.13	4.49
Less govt & other income	4.92	6.88	4.95	4.24
With labor & management	5.34	7.46	5.34	4.65
Net value per unit	6.44	6.49	6.28	6.54
Machinery cost per acre	86.05	88.91	79.93	94.36
Est. labor hours per acre	1.43	1.34	1.66	1.50

Crop Enterprise Analysis
Minnesota and North Dakota Business Management Education
Red River Valley, 2013
(Farms Sorted By Net Return)

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 fields	116	19	25	24
Number of farms	92	18	19	19
Acres	326.26	261.28	423.10	399.36
Yield per acre (bu.)	68.27	51.62	69.80	75.36
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.49	6.46	6.50	6.55
Total product return per acre	442.98	333.22	453.96	493.67
Crop insurance per acre	4.45	4.54	0.14	7.49
Other crop income per acre	0.42	-	-	0.48
Gross return per acre	447.85	337.76	454.11	501.64
Direct Expenses				
Seed	25.22	29.98	26.35	21.45
Fertilizer	111.43	112.95	111.41	111.25
Crop chemicals	29.91	19.22	31.89	35.07
Crop insurance	20.12	16.11	19.17	21.38
Drying expense	0.41	-	0.92	0.52
Fuel & oil	19.81	19.11	17.84	20.96
Repairs	22.65	26.66	18.48	20.45
Custom hire	6.10	7.01	6.63	4.44
Hired labor	1.14	0.70	2.96	0.32
Land rent	112.08	135.91	126.96	93.58
Machinery leases	0.53	0.82	1.36	0.16
Operating interest	2.85	2.62	3.98	1.40
Miscellaneous	3.28	1.16	3.99	2.56
Total direct expenses per acre	355.53	372.26	371.94	333.52
Return over direct exp per acre	92.32	-34.50	82.17	168.12
Overhead Expenses				
Hired labor	12.53	14.41	8.05	10.02
Machinery leases	2.21	2.24	2.79	2.80
Building leases	0.65	0.44	1.02	0.30
Farm insurance	5.88	6.23	5.56	4.81
Utilities	3.50	4.91	2.58	3.14
Dues & professional fees	2.97	4.47	3.16	2.65
Interest	3.23	2.64	3.34	2.64
Mach & bldg depreciation	27.48	23.45	26.87	25.82
Miscellaneous	4.02	3.76	5.74	3.48
Total overhead expenses per acre	62.48	62.54	59.11	55.64
Total dir & ovhd expenses per acre	418.00	434.81	431.05	389.15
Net return per acre	29.85	-97.05	23.05	112.48
Government payments	12.95	11.19	13.87	13.69
Net return with govt pmts	42.80	-85.86	36.93	126.17
Labor & management charge	25.14	27.21	23.87	24.07
Net return over lbr & mgt	17.66	-113.07	13.06	102.10
Cost of Production				
Total direct expense per bu.	5.21	7.21	5.33	4.43
Total dir & ovhd exp per bu.	6.12	8.42	6.18	5.16
Less govt & other income	5.86	8.12	5.97	4.88
With labor & management	6.23	8.65	6.32	5.20
Net value per unit	6.49	6.46	6.50	6.55
Machinery cost per acre	80.36	81.85	75.27	76.19
Est. labor hours per acre	1.37	1.47	1.16	1.22

MyFarm Financial Scorecard

Year: _____

Name: _____

	This Year	5-Year Ave	Strong		Vulnerable
Liquidity					
Current ratio			1.7		1.1
Working capital					
Working cap to gross revenue			25%		10%
Solvency (market)	Note: These solvency ratios include deferred liabilities				
Farm debt/asset ratio			30%		60%
Farm equity/asset ratio			70%		40%
Farm debt/equity ratio			0.43		1.50
Profitability (Cost)					
Rate of return on farm assets			8%		4%
Rate of return on farm equity			10%		3%
Operating profit margin			25%		15%
Net farm income					
EBITDA					
Repayment Capacity (Accrual)					
Capital debt repay capacity					
Capital debt repay margin					
Replacement margin					
Term-debt coverage ratio			1.50		1.20
Replacement margin ratio			1.40		1.10
Financial Efficiency					
Asset-turnover rate (market)			45%		30%
Operating-expense ratio			60%		80%
Depreciation-expense ratio			5%		15%
Interest-expense ratio			5%		10%
Net farm income ratio			20%		10%