

Minnesota and North Dakota
Farm Business Management Education

Red River Valley 2011 Report



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Minnesota Farm Business Management Education
and
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RED RIVER VALLEY AVERAGES
2011 ANNUAL REPORT

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2011 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 2011 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 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."

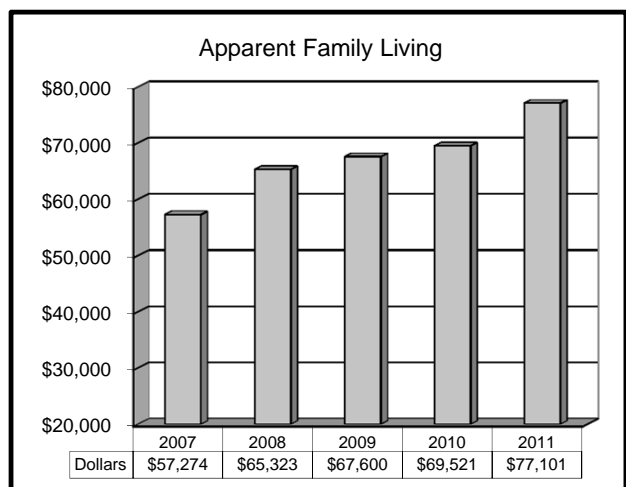
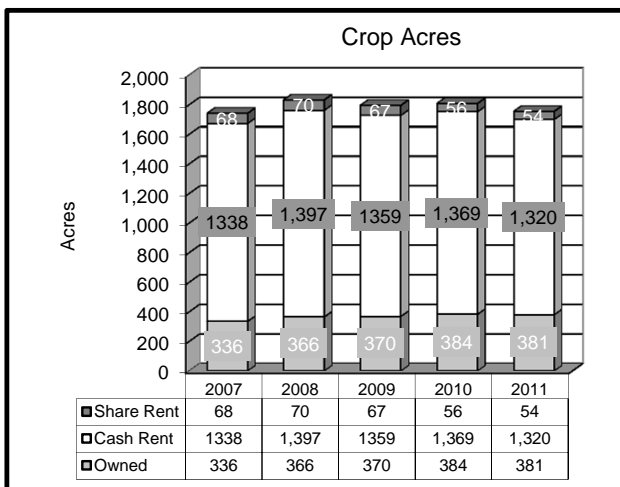
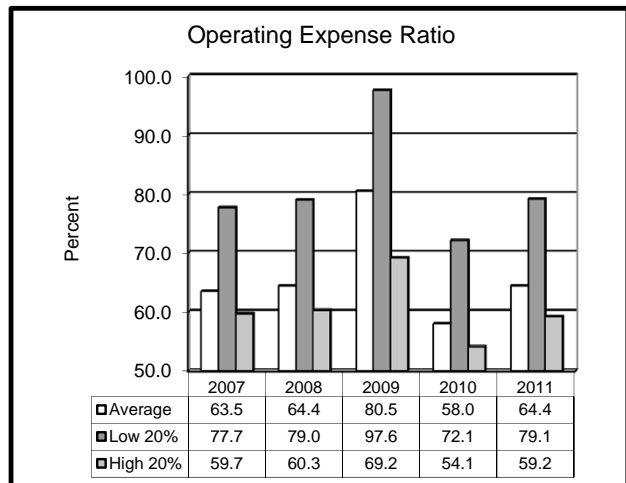
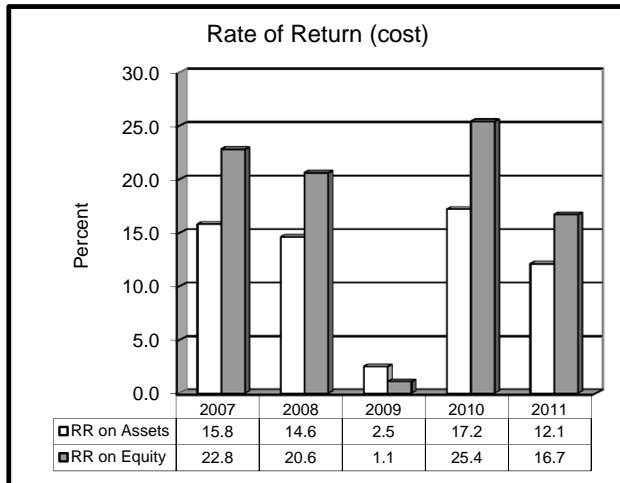
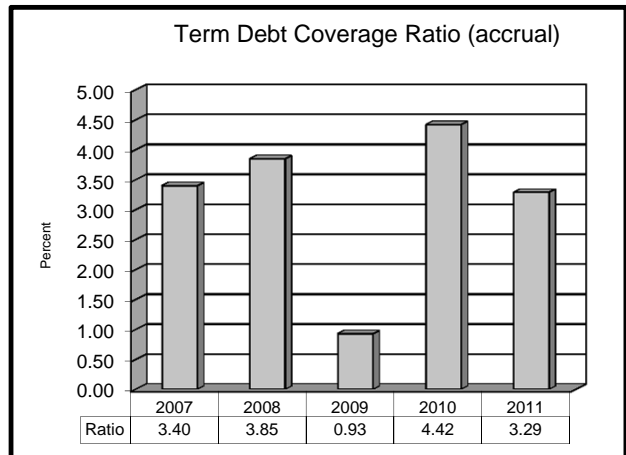
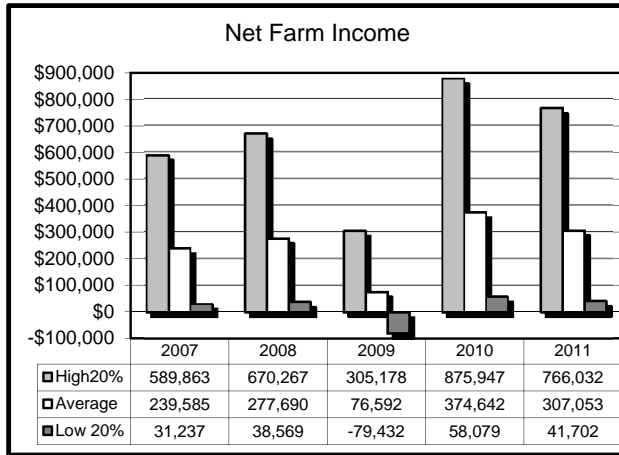
Operator and Labor Information

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 Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Cash Farm Income				
Barley	1,769	235	-	5,068
Beans, Black Turtle	2,634	-	1,475	9,663
Beans, Dark Red Kidney	45	-	-	223
Beans, Navy	3,191	-	2,279	5,988
Beans, Pinto	5,234	-	-	9,724
Beans, Small Red	298	-	-	1,489
Corn	233,523	88,085	211,932	445,452
Hay, Alfalfa	631	628	-	1,710
Oats	40	202	-	-
Peas, Green	442	-	-	-
Potatoes	8,818	41,796	-	2,294
Potatoes, Seed	1,917	9,583	-	-
Soybeans	230,280	101,602	248,289	375,361
Straw	1,626	-	7,781	283
Sugar Beets	266,811	54,000	245,077	632,672
Sunflowers	3,039	-	6,686	5,460
Sunflowers, Confectionary	600	-	-	2,297
Wheat, Durum	56	279	-	-
Wheat, Spring	162,679	37,877	143,598	369,271
Wheat, Winter	22	112	-	-
Soybeans, Organic	875	4,053	-	-
Soybeans, Food	5,081	-	-	7,330
Corn, Organic	262	-	-	-
Hay, Alfalfa, Organic	979	4,301	595	-
Wheat, Spring, Organic	279	286	-	-
Corn, Blue, Organic	174	870	-	-
Grass Seed, Switchgrass	60	301	-	-
Miscellaneous crop income	9	19	-	26
Beef Cow-Calf, Beef Calves	395	686	-	-
Beef Backgrounding	272	199	-	-
Beef Finishing	1,571	-	-	-
Hogs, Farrow To Finish, Raised Ho	5,207	-	16,123	-
Cull breeding livestock	148	136	418	-
Misc. livestock income	11	33	-	-
Direct, CCP & ACRE pymts	23,974	9,506	22,335	43,302
CRP payments	1,177	277	1,014	2,550
Other government payments	10,915	5,172	6,228	16,257
Custom work income	8,953	3,369	6,663	7,832
Patronage dividends, cash	15,537	4,779	14,774	34,646
Insurance income	74,581	43,121	81,836	102,195
Sale of resale items	2,297	-	1,533	4,433
Other farm income	27,998	8,587	27,914	63,606
Gross Cash Farm Income	1,104,412	420,095	1,046,547	2,149,128

Farm Income Statement (Continued)
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Cash Farm Expense				
Seed	125,446	55,798	119,214	241,610
Fertilizer	126,070	45,187	121,277	237,998
Crop chemicals	62,040	24,865	54,414	137,763
Crop insurance	39,813	16,851	36,793	74,102
Drying expense	1,495	803	596	2,424
Storage	438	486	180	912
Hauling and trucking	1,283	1,657	403	3,027
Crop marketing	818	1,277	1,381	239
Crop miscellaneous	5,566	918	2,660	10,251
Feeder livestock purchase	1,296	-	-	-
Purchased feed	3,334	328	8,352	-
Breeding fees	65	-	189	-
Veterinary	248	108	154	28
Supplies	294	642	200	-
Livestock marketing	128	-	533	-
Interest	33,352	20,531	33,206	53,983
CCC buyback	11,228	5,964	11,541	21,221
Fuel & oil	55,214	24,820	50,907	105,366
Repairs	68,401	38,105	62,485	115,661
Custom hire	14,939	6,983	10,562	30,935
Hired labor	34,475	9,730	27,655	79,897
Land rent	123,667	46,721	124,191	229,289
Stock/quota lease	25,865	10,262	25,030	44,290
Machinery leases	8,467	4,813	13,033	13,531
Building leases	1,942	749	2,084	3,639
Real estate taxes	6,787	2,820	7,220	12,795
Farm insurance	12,115	4,848	10,572	25,236
Utilities	8,427	5,614	7,127	14,225
Dues & professional fees	6,682	3,964	6,999	11,290
Purchase of resale items	2,302	119	1,923	5,324
Miscellaneous	7,692	5,641	7,623	13,168
Total cash expense	789,890	340,607	748,504	1,488,203
Net cash farm income	314,522	79,487	298,043	660,925
Inventory Changes				
Prepays and supplies	33,868	926	30,027	95,565
Accounts receivable	6,165	2,949	-5,277	27,775
Hedging accounts	-2,227	-3,275	-3,442	-4,093
Other current assets	191	531	217	294
Crops and feed	-406	-18,485	-49,230	76,677
Market livestock	1,225	168	2,266	-
Breeding livestock	56	574	-2	-
Other assets	11,497	1,699	11,588	36,572
Accounts payable	1,006	-585	3,256	-15,745
Accrued interest	571	-1,309	651	3,133
Total inventory change	51,949	-16,807	-9,947	220,178
Net operating profit	366,471	62,680	288,095	881,103
Depreciation				
Machinery and equipment	-54,737	-17,645	-51,772	-109,107
Titled vehicles	-3,584	-1,846	-4,503	-5,119
Buildings and improvements	-3,764	-1,487	-3,451	-8,122
Total depreciation	-62,086	-20,978	-59,726	-122,347
Net farm income from operations	304,385	41,702	228,370	758,756
Gain or loss on capital sales	2,668	-	-	7,277
Net farm income	307,053	41,702	228,370	766,032

Inventory Changes
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Net cash farm income	314,522	79,487	298,043	660,925
Crops and Feed				
Ending inventory	546,315	150,602	400,837	1,306,786
Beginning inventory	546,721	169,087	450,068	1,230,108
Inventory change	-406	-18,485	-49,230	76,677
Market Livestock				
Ending inventory	3,147	1,660	6,790	-
Beginning inventory	1,922	1,492	4,523	-
Inventory change	1,225	168	2,266	-
Accts Receivable				
Ending inventory	64,035	16,599	41,417	126,396
Beginning inventory	57,869	13,650	46,695	98,621
Inventory change	6,165	2,949	-5,277	27,775
Prepaid Expenses and Supplies				
Ending inventory	131,244	32,486	124,388	303,424
Beginning inventory	97,375	31,559	94,361	207,859
Inventory change	33,868	926	30,027	95,565
Hedging Activities				
Ending inventory	5,934	3,913	3,598	18,604
Withdrawals	4,655	-	231	21,245
Beginning inventory	5,501	3,537	4,038	17,549
Deposits	7,314	3,651	3,233	26,393
Gain or loss	-2,227	-3,275	-3,442	-4,093
Other Current Assets				
Ending inventory	1,018	695	617	2,343
Beginning inventory	827	164	400	2,049
Inventory change	191	531	217	294
Breeding Livestock				
Ending inventory	1,878	2,579	1,106	-
Capital sales	74	189	-	-
Beginning inventory	1,850	2,004	1,109	-
Capital purchases	46	190	-	-
Depreciation, capital adjust	56	574	-2	-
Other Capital Assets				
Ending inventory	234,759	56,684	186,831	598,297
Capital sales	4,013	2,422	310	12,941
Beginning inventory	219,979	53,180	171,856	558,810
Capital purchases	7,296	4,227	3,697	15,857
Depreciation, capital adjust	11,497	1,699	11,588	36,572
Accounts Payable				
Beginning inventory	25,417	11,539	26,106	38,324
Ending inventory	24,411	12,123	22,851	54,069
Inventory change	1,006	-585	3,256	-15,745
Accrued Interest				
Beginning inventory	14,335	5,655	12,954	28,408
Ending inventory	13,762	6,960	12,307	25,274
Inventory change	571	-1,309	651	3,133
Total inventory change	51,949	-16,807	-9,947	220,178
Net operating profit	366,471	62,680	288,095	881,103

Depreciation
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Net operating profit	366,471	62,680	288,095	881,103
Machinery and Equipment				
Ending inventory	593,718	227,167	567,520	1,139,784
Capital sales	18,536	11,683	13,490	36,606
Beginning inventory	503,744	203,869	477,694	974,912
Capital purchases	163,248	52,626	155,088	310,584
Depreciation, capital adjust.	-54,737	-17,645	-51,772	-109,107
Titled Vehicles				
Ending inventory	33,471	22,168	32,437	49,331
Capital sales	400	588	249	280
Beginning inventory	29,629	19,697	28,543	47,015
Capital purchases	7,827	4,905	8,646	7,715
Depreciation, capital adjust.	-3,584	-1,846	-4,503	-5,119
Buildings and Improvements				
Ending inventory	140,290	49,421	139,891	315,155
Capital sales	87	-	-	-
Beginning inventory	95,946	41,907	96,386	189,737
Capital purchases	48,196	9,001	46,956	133,540
Depreciation, capital adjust.	-3,764	-1,487	-3,451	-8,122
Total depreciation, capital adj.	-62,086	-20,978	-59,726	-122,347
Net farm income from operations	304,385	41,702	228,370	758,756
Gain or loss on capital sales	2,668	-	-	7,277
Net farm income	307,053	41,702	228,370	766,032

Profitability Measures
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Profitability (assets valued at cost)				
Net farm income from operations	304,385	41,702	228,370	758,756
Rate of return on assets	12.1 %	3.3 %	10.0 %	14.9 %
Rate of return on equity	16.7 %	1.2 %	13.7 %	19.9 %
Operating profit margin	23.4 %	6.6 %	19.1 %	29.5 %
Asset turnover rate	51.6 %	49.7 %	52.2 %	50.4 %
Farm interest expense	32,780	21,840	32,555	50,850
Value of operator lbr and mgmt.	76,128	36,959	71,522	136,897
Return on farm assets	261,038	26,583	189,403	672,708
Average farm assets	2,158,256	812,846	1,902,723	4,524,598
Return on farm equity	228,257	4,743	156,848	621,858
Average farm equity	1,365,245	398,804	1,142,833	3,118,683
Value of farm production	1,113,847	403,777	992,314	2,280,461

Liquidity & Repayment Capacity Measures
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Liquidity				
Current ratio	2.10	1.42	1.86	2.73
Working capital	344,156	70,297	295,474	967,854
Working capital to gross inc	36.2 %	19.1 %	29.9 %	50.1 %
Current assets	656,476	238,376	638,516	1,528,309
Current liabilities	312,320	168,079	343,042	560,456
Gross revenues (accrual)	950,202	367,896	988,111	1,931,853
Repayment capacity				
Net farm income from operations	304,385	41,702	228,370	758,756
Depreciation	62,086	20,978	59,726	122,347
Personal income	19,431	27,146	21,347	16,780
Family living/owner withdrawals	-77,101	-50,326	-79,622	-113,299
Payments on personal debt	-6,854	-5,287	-12,208	-4,510
Income taxes paid	-23,712	-6,860	-22,151	-48,475
Interest on term debt	25,260	14,237	24,796	42,998
Capital debt repayment capacity	303,495	41,590	220,257	774,597
Scheduled term debt payments	-92,238	-42,899	-87,059	-174,063
Capital debt repayment margin	211,257	-1,309	133,198	600,534
Cash replacement allowance	-19,836	-9,774	-20,178	-31,469
Replacement margin	191,421	-11,083	113,020	569,065
Term debt coverage ratio	3.29	0.97	2.53	4.45
Replacement coverage ratio	2.71	0.79	2.05	3.77

Balance Sheet at Cost Values
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	216	48	47	30
Assets				
Current Farm Assets				
Cash and checking balance	44,852	17,960	38,191	150,061
Prepaid expenses & supplies	113,571	31,126	127,449	279,340
Growing crops	149	-	83	945
Accounts receivable	56,477	16,456	39,794	108,830
Hedging accounts	4,475	4,076	2,700	15,802
Crops held for sale or feed	414,817	155,613	402,763	908,875
Crops under government loan	18,131	11,186	19,738	61,627
Market livestock held for sale	3,162	1,326	7,223	-
Other current assets	842	632	573	2,829
Total current farm assets	656,476	238,376	638,516	1,528,309
Intermediate Farm Assets				
Breeding livestock	1,536	2,129	1,177	-
Machinery and equipment	503,590	177,162	560,321	971,815
Titled vehicles	29,539	20,662	32,596	41,969
Other intermediate assets	143,149	43,699	148,685	403,960
Total intermediate farm assets	677,814	243,653	742,780	1,417,745
Long Term Farm Assets				
Farm land	463,167	247,353	443,574	981,586
Buildings and improvements	117,545	39,806	130,864	310,586
Other long-term assets	41,329	10,067	48,796	100,729
Total long-term farm assets	622,041	297,226	623,234	1,392,901
Total Farm Assets	1,956,332	779,254	2,004,530	4,338,955
Total Nonfarm Assets	245,063	148,554	298,934	432,626
Total Assets	2,201,395	927,808	2,303,464	4,771,581
Liabilities				
Current Farm Liabilities				
Accrued interest	12,491	6,752	11,664	23,935
Accounts payable	19,276	11,198	22,837	35,523
Current notes	206,786	117,677	232,094	345,543
Government crop loans	6,276	3,591	6,989	21,975
Principal due on term debt	67,491	28,859	69,458	133,480
Total current farm liabilities	312,320	168,079	343,042	560,456
Total intermediate farm liabs	162,323	77,812	177,575	267,712
Total long term farm liabilities	280,713	188,285	235,099	549,512
Total farm liabilities	755,356	434,176	755,716	1,377,680
Total nonfarm liabilities	75,267	48,245	110,620	94,892
Total liabilities	830,623	482,421	866,336	1,472,572
Net worth (farm and nonfarm)	1,370,772	445,387	1,437,128	3,299,009
Net worth change	198,267	29,206	199,075	468,789
Percent net worth change	17 %	7 %	16 %	17 %
Ratio Analysis				
Current farm liabilities / assets	48 %	71 %	54 %	37 %
Intermediate farm liab. / assets	24 %	32 %	24 %	19 %
Long term farm liab. / assets	45 %	63 %	38 %	39 %
Total debt to asset ratio	38 %	52 %	38 %	31 %

Balance Sheet at Market Values
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	216	48	47	30
Assets				
Current Farm Assets				
Cash and checking balance	44,852	17,960	38,191	150,061
Prepaid expenses & supplies	113,571	31,126	127,449	279,340
Growing crops	149	-	83	945
Accounts receivable	56,477	16,456	39,794	108,830
Hedging accounts	4,475	4,076	2,700	15,802
Crops held for sale or feed	414,817	155,613	402,763	908,875
Crops under government loan	18,131	11,186	19,738	61,627
Market livestock held for sale	3,162	1,326	7,223	-
Other current assets	842	632	573	2,829
Total current farm assets	656,476	238,376	638,516	1,528,309
Intermediate Farm Assets				
Breeding livestock	1,683	2,788	1,177	-
Machinery and equipment	631,975	236,536	705,804	1,206,326
Titled vehicles	35,119	22,378	38,277	61,258
Other intermediate assets	222,530	49,472	289,739	577,074
Total intermediate farm assets	891,307	311,174	1,034,997	1,844,658
Long Term Farm Assets				
Farm land	829,491	465,279	955,935	1,627,076
Buildings and improvements	135,602	46,834	157,142	347,812
Other long-term assets	44,299	8,709	56,440	108,452
Total long-term farm assets	1,009,392	520,823	1,169,517	2,083,340
Total Farm Assets	2,557,175	1,070,372	2,843,030	5,456,307
Total Nonfarm Assets	273,161	162,347	344,293	489,939
Total Assets	2,830,336	1,232,719	3,187,323	5,946,246
Liabilities				
Current Farm Liabilities				
Accrued interest	12,491	6,752	11,664	23,935
Accounts payable	19,276	11,198	22,837	35,523
Current notes	206,786	117,677	232,094	345,543
Government crop loans	6,276	3,591	6,989	21,975
Principal due on term debt	67,491	28,859	69,458	133,480
Total current farm liabilities	312,320	168,079	343,042	560,456
Total intermediate farm liab	162,323	77,812	177,575	267,712
Total long term farm liabilities	280,713	188,285	235,099	549,512
Total farm liabilities	755,356	434,176	755,716	1,377,680
Total nonfarm liabilities	75,267	48,245	110,620	94,892
Total liab excluding deferreds	830,623	482,421	866,336	1,472,572
Total deferred liabilities	275,812	107,969	320,009	582,460
Total liabilities	1,106,435	590,390	1,186,344	2,055,032
Retained earnings	1,370,772	445,387	1,437,128	3,299,009
Market valuation equity	353,129	196,942	563,851	592,205
Net worth (farm and nonfarm)	1,723,901	642,329	2,000,979	3,891,215
Net worth excluding deferreds	1,999,713	750,298	2,320,987	4,473,675
Net worth change	296,471	64,583	312,540	627,480
Percent net worth change	21 %	11 %	19 %	19 %
Ratio Analysis				
Current farm liabilities / assets	48 %	71 %	54 %	37 %
Intermediate farm liab. / assets	18 %	25 %	17 %	15 %
Long term farm liab. / assets	28 %	36 %	20 %	26 %
Total debt to asset ratio	39 %	48 %	37 %	35 %
Debt to assets excl deferreds	29 %	39 %	27 %	25 %

Statement Of Cash Flows
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Beginning cash (farm & nonfarm)	44,249	40,987	32,424	101,161
Cash Provided By Operating Activities				
Gross cash farm income	1,104,412	420,095	1,046,547	2,149,128
Total cash farm expense	-789,890	-340,607	-748,504	-1,488,203
Net cash from hedging transactions	-2,659	-3,651	-3,003	-5,148
Cash provided by operating	311,863	75,836	295,040	655,777
Cash Provided By Investing Activities				
Sale of breeding livestock	74	189	-	-
Sale of machinery & equipment	18,691	11,683	13,490	36,626
Sale of titled vehicles	419	588	249	373
Sale of farm land	399	-	341	106
Sale of farm buildings	87	-	-	-
Sale of other farm assets	6,508	2,422	310	20,105
Sale of nonfarm assets	3,889	2,750	2,263	12,618
Purchase of breeding livestock	-46	-190	-	-
Purchase of machinery & equip.	-163,248	-52,626	-155,088	-310,584
Purchase of titled vehicles	-7,827	-4,905	-8,646	-7,715
Purchase of farm land	-75,087	-60,359	-24,423	-121,682
Purchase of farm buildings	-48,196	-9,001	-46,956	-133,540
Purchase of other farm assets	-7,296	-4,227	-3,697	-15,857
Purchase of nonfarm assets	-22,190	-12,700	-21,054	-34,217
Cash provided by investing	-293,823	-126,375	-243,211	-553,767
Cash Provided By Financing Activities				
Money borrowed	510,082	325,165	458,492	922,817
Principal payments	-437,049	-259,399	-422,128	-812,620
Personal income	19,431	27,146	21,347	16,780
Family living/owner withdrawals	-77,101	-50,326	-79,622	-113,299
Income and social security tax	-23,712	-6,860	-22,151	-48,475
Capital contributions	-	-	-	-
Capital distributions	-694	-	-	-
Dividends paid	-800	-	-	-4,000
Cash gifts and inheritances	15,388	20,959	9,223	3,486
Gifts given	-860	-91	-1,337	-2,870
Other cash flows	-	-	-	-
Cash provided by financing	4,687	56,594	-36,176	-38,181
Net change in cash balance	22,726	6,055	15,653	63,829
Ending cash (farm & nonfarm)	66,975	47,042	48,077	164,990

Financial Standards Measures
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Liquidity				
Current ratio	2.10	1.42	1.86	2.73
Working capital	344,156	70,297	295,474	967,854
Working capital to gross inc	36.2 %	19.1 %	29.9 %	50.1 %
Solvency (market)				
Farm debt to asset ratio	38 %	50 %	36 %	34 %
Farm equity to asset ratio	62 %	50 %	64 %	66 %
Farm debt to equity ratio	0.62	0.98	0.55	0.52
Profitability (cost)				
Rate of return on farm assets	12.1 %	3.3 %	10.0 %	14.9 %
Rate of return on farm equity	16.7 %	1.2 %	13.7 %	19.9 %
Operating profit margin	23.4 %	6.6 %	19.1 %	29.5 %
Net farm income	307,053	41,702	228,370	766,032
EBIDTA	399,251	84,521	320,651	931,953
Repayment Capacity				
Capital debt repayment capacity	303,495	41,590	220,257	774,597
Capital debt repayment margin	211,257	-1,309	133,198	600,534
Replacement margin	191,421	-11,083	113,020	569,065
Term debt coverage ratio	3.29	0.97	2.53	4.45
Replacement coverage ratio	2.71	0.79	2.05	3.77
Efficiency				
Asset turnover rate (cost)	51.6 %	49.7 %	52.2 %	50.4 %
Operating expense ratio	64.4 %	79.1 %	68.0 %	59.2 %
Depreciation expense ratio	5.5 %	5.2 %	6.0 %	5.4 %
Interest expense ratio	3.0 %	5.1 %	3.3 %	2.4 %
Net farm income ratio	27.4 %	10.3 %	22.8 %	33.5 %

Crop Production and Marketing Summary
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Acreage Summary				
Total acres owned	389	225	384	637
Total crop acres	1,755	742	1,712	3,182
Crop acres owned	381	191	403	621
Crop acres cash rented	1,320	505	1,269	2,472
Crop acres share rented	54	46	40	90
Total pasture acres	3	-	-	-
Percent crop acres owned	22 %	26 %	24 %	20 %
Average Price Received (Cash Sales Only)				
Soybeans per bushel	11.24	11.00	11.34	11.20
Wheat, Spring per bushel	7.44	6.40	7.36	7.63
Corn per bushel	5.15	5.07	5.01	5.15
Sunflowers per cwt	28.89	-	-	-
Beans, Navy per cwt	29.84	-	-	-
Beans, Pinto per cwt	36.26	-	-	-
Barley per bushel	4.49	-	-	-
Hay, Alfalfa per ton	81.45	-	-	-
Beans, Black Turtle per cwt	36.69	-	-	-
Sugar Beets per ton	63.86	-	-	-
Soybeans, Food per bushel	12.27	-	-	-
Average Yield Per Acre				
Soybeans (bushel)	31.80	28.82	29.71	33.69
Wheat, Spring (bushel)	44.98	36.85	42.06	50.83
Corn (bushel)	114.63	104.58	108.19	118.99
Sugar Beets (ton)	18.75	16.57	16.98	20.55
Soybeans, Food (bushel)	26.61	-	-	30.39
Hay, Alfalfa (ton)	4.20	-	-	-
Beans, Navy (cwt)	12.88	-	-	-
Barley (bushel)	58.69	-	-	-
Beans, Pinto (cwt)	20.20	-	-	-
Soybeans, Organic (bushel)	21.93	-	-	-
Sunflowers (cwt)	14.86	-	-	-

Operator and Labor Information
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Operator Information				
Average number of operators	1.1	0.9	1.1	1.4
Average age of operators	45.3	39.7	45.5	49.0
Average number of years farming	29.0	16.0	22.0	57.0
Results Per Operator				
Working capital	431,572	79,570	274,812	919,140
Total assets (market)	2,849,971	1,451,659	2,914,107	4,369,992
Total liabilities	1,109,609	668,123	1,109,939	1,596,970
Net worth (market)	1,740,362	783,536	1,804,168	2,773,022
Net worth excl deferred liabs	2,036,096	904,321	2,095,090	3,275,112
Gross farm income	1,010,512	446,657	928,323	1,609,708
Total farm expense	736,074	400,578	716,869	1,075,373
Net farm income from operations	274,438	46,079	211,453	534,335
Net nonfarm income	17,519	29,995	19,765	11,817
Family living & tax withdrawals	90,894	63,189	94,234	113,925
Total acres owned	351.1	249.0	355.1	448.3
Total crop acres	1,582.7	820.1	1,585.2	2,241.1
Crop acres owned	343.3	211.1	373.0	437.2
Crop acres cash rented	1,190.4	558.3	1,175.2	1,740.8
Crop acres share rented	49.0	50.8	37.0	63.1
Total pasture acres	2.7	-	-	-
Labor Analysis				
Number of farms	250	50	50	50
Total unpaid labor hours	1,768	1,248	1,823	2,279
Total hired labor hours	1,837	651	1,650	4,253
Total labor hours per farm	3,604	1,899	3,473	6,532
Unpaid hours per operator	1,594	1,378	1,688	1,605

Nonfarm Summary
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	50	50	50
Nonfarm Income				
Personal wages & salary	15,105	22,298	14,819	13,283
Net nonfarm business income	1,251	2,753	430	798
Personal rental income	66	96	120	14
Personal interest income	147	75	254	183
Personal cash dividends	11	3	-	1
Tax refunds	512	665	234	1,036
Other nonfarm income	2,340	1,256	5,489	1,466
Total nonfarm income	19,431	27,146	21,347	16,780
Gifts and inheritances	15,388	20,959	9,223	3,486

Financial Summary
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(Farms Sorted By Gross Farm Income)

	<u>Avg. Of All Farms</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>Over 1,000,000</u>
Number of farms	250	25	32	76	111
Income Statement					
Gross cash farm income	1,104,412	173,467	376,201	753,864	1,820,153
Total cash farm expense	789,890	132,896	282,130	542,393	1,293,962
Net cash farm income	314,522	40,571	94,071	211,471	526,190
Inventory change	51,949	32,133	30,931	47,834	67,829
Depreciation	-62,086	-7,933	-19,330	-47,935	-99,561
Net farm income from operations	304,385	64,772	105,672	211,370	494,459
Gain or loss on capital sales	2,668	-	313	364	5,670
Average net farm income	307,053	64,772	105,984	211,734	500,128
Median net farm income	226,111	59,066	103,239	198,968	406,726
Profitability (cost)					
Rate of return on assets	12.1 %	13.0 %	9.9 %	11.8 %	12.3 %
Rate of return on equity	16.7 %	24.4 %	13.6 %	16.6 %	16.8 %
Operating profit margin	23.4 %	24.8 %	21.6 %	23.3 %	23.6 %
Asset turnover rate	51.6 %	52.4 %	45.8 %	50.7 %	52.3 %
Liquidity & Repayment (end of year)					
Current assets	656,476	122,715	311,141	582,417	1,058,176
Current liabilities	312,320	64,213	142,792	264,641	515,020
Current ratio	2.10	1.91	2.18	2.20	2.05
Working capital	344,156	58,501	168,349	317,776	543,157
Working capital to gross inc	36.2 %	27.9 %	41.9 %	40.7 %	34.0 %
Term debt coverage ratio	3.29	2.48	2.98	2.95	3.46
Replacement coverage ratio	2.71	2.19	2.39	2.31	2.89
Solvency (end of year at market)					
Number of sole proprietors	216	25	31	72	82
Total farm assets	2,557,175	584,718	1,279,678	2,177,033	4,147,726
Total farm liabilities	981,490	275,130	518,138	847,742	1,556,369
Total assets	2,830,336	672,144	1,457,676	2,399,284	4,570,586
Total liabilities	1,106,435	320,649	582,140	938,200	1,762,004
Net worth	1,723,901	351,495	875,537	1,461,084	2,808,582
Net worth change	296,471	52,386	196,317	255,338	465,145
Farm debt to asset ratio	38 %	47 %	40 %	39 %	38 %
Total debt to asset ratio	39 %	48 %	40 %	39 %	39 %
Nonfarm Information					
Net nonfarm income	19,431	31,584	27,661	18,235	14,107
Crop Acres					
Total acres owned	389	111	229	376	526
Total crop acres	1,755	390	802	1,381	2,680
Total crop acres owned	381	107	215	361	523
Total crop acres cash rented	1,320	253	520	965	2,101
Total crop acres share rented	54	31	67	55	55

Financial Summary
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	250	30	59	57	80	24
Income Statement						
Gross cash farm income	1,104,412	496,463	981,685	1,233,315	1,320,760	1,138,742
Total cash farm expense	789,890	376,997	730,999	916,516	882,359	841,810
Net cash farm income	314,522	119,465	250,686	316,799	438,401	296,932
Inventory change	51,949	30,773	32,389	90,460	17,086	151,250
Depreciation	-62,086	-17,044	-47,297	-70,345	-80,465	-73,862
Net farm income from operations	304,385	133,194	235,779	336,913	375,022	374,321
Gain or loss on capital sales	2,668	-	-	8,357	2,383	-
Average net farm income	307,053	133,194	235,779	345,270	377,405	374,321
Median net farm income	226,111	106,456	203,574	306,941	287,938	201,163
Profitability (cost)						
Rate of return on assets	12.1 %	16.9 %	11.4 %	12.5 %	11.6 %	12.7 %
Rate of return on equity	16.7 %	36.5 %	16.2 %	17.8 %	15.4 %	16.5 %
Operating profit margin	23.4 %	21.5 %	20.0 %	22.7 %	25.5 %	25.6 %
Asset turnover rate	51.6 %	78.6 %	57.1 %	55.2 %	45.3 %	49.7 %
Liquidity & Repayment (end of year)						
Current assets	656,476	265,987	606,662	697,790	878,267	505,674
Current liabilities	312,320	159,866	295,624	364,914	381,319	228,169
Current ratio	2.10	1.66	2.05	1.91	2.30	2.22
Working capital	344,156	106,121	311,038	332,876	496,948	277,505
Working capital to gross inc	36.2 %	20.2 %	33.2 %	32.4 %	43.1 %	37.5 %
Term debt coverage ratio	3.29	3.45	2.75	3.21	3.20	5.49
Replacement coverage ratio	2.71	3.31	2.38	2.62	2.63	3.79
Solvency (end of year at market)						
Number of sole proprietors	216	29	55	43	69	20
Total farm assets	2,557,175	882,244	2,176,789	2,524,930	3,620,055	2,434,276
Total farm liabilities	981,490	533,491	893,722	1,076,857	1,247,774	748,731
Total assets	2,830,336	961,665	2,356,724	2,883,518	3,997,286	2,702,023
Total liabilities	1,106,435	587,171	1,013,308	1,245,263	1,382,019	866,221
Net worth	1,723,901	374,494	1,343,416	1,638,255	2,615,267	1,835,801
Net worth change	296,471	115,086	293,805	235,053	421,485	267,557
Farm debt to asset ratio	38 %	60 %	41 %	43 %	34 %	31 %
Total debt to asset ratio	39 %	61 %	43 %	43 %	35 %	32 %
Nonfarm Information						
Net nonfarm income	19,431	17,811	25,527	11,756	22,417	14,745
Crop Acres						
Total acres owned	389	99	226	381	605	454
Total crop acres	1,755	828	1,541	2,076	1,989	1,904
Total crop acres owned	381	98	219	400	588	398
Total crop acres cash rented	1,320	706	1,296	1,613	1,342	1,381
Total crop acres share rented	54	24	26	63	59	125

Financial Summary
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(Farms Sorted By County)

	<u>Avg. Of All Farms</u>	<u>Clay</u>	<u>Marshall</u>	<u>Norman</u>	<u>Polk</u>	<u>Wilkin</u>	<u>Cass</u>	<u>Richland</u>
Number of farms	250	45	9	38	35	47	16	42
Income Statement								
Gross cash farm income	1,104,412	1,185,196	936,417	1,208,574	1,570,287	810,650	923,771	942,935
Total cash farm expense	789,890	847,928	750,221	951,481	1,095,465	564,516	566,398	646,374
Net cash farm income	314,522	337,268	186,196	257,094	474,822	246,134	357,374	296,561
Inventory change	51,949	-14,827	144,429	74,094	233,727	30,464	-115,047	10,465
Depreciation	-62,086	-59,418	-57,160	-63,461	-95,175	-41,737	-60,046	-57,203
Net farm income from operations	304,385	263,023	273,465	267,727	613,374	234,860	182,281	249,822
Gain or loss on capital sales	2,668	8,085	2,778	6,986	-	-	-	143
Average net farm income	307,053	271,108	276,242	274,713	613,374	234,860	182,281	249,965
Median net farm income	226,111	248,948	148,562	216,904	364,686	195,111	136,583	172,941
Profitability (cost)								
Rate of return on assets	12.1 %	10.2 %	12.8 %	9.5 %	16.5 %	13.2 %	9.6 %	10.9 %
Rate of return on equity	16.7 %	13.5 %	20.4 %	13.9 %	22.1 %	18.5 %	12.0 %	14.5 %
Operating profit margin	23.4 %	18.9 %	22.9 %	18.7 %	31.3 %	25.0 %	18.9 %	23.2 %
Asset turnover rate	51.6 %	54.0 %	56.0 %	51.0 %	52.7 %	52.6 %	50.9 %	47.0 %
Liquidity & Repayment (end of year)								
Current assets	656,476	709,369	616,899	768,182	751,121	505,522	557,536	620,089
Current liabilities	312,320	387,978	307,163	468,201	323,616	202,864	171,861	247,744
Current ratio	2.10	1.83	2.01	1.64	2.32	2.49	3.24	2.50
Working capital	344,156	321,391	309,736	299,981	427,505	302,658	385,675	372,345
Working capital to gross inc	36.2 %	30.3 %	43.4 %	27.9 %	38.2 %	37.2 %	47.3 %	44.7 %
Term debt coverage ratio	3.29	2.58	3.43	2.41	5.09	3.16	3.11	3.17
Replacement coverage ratio	2.71	2.00	2.66	2.16	4.37	2.60	2.68	2.48
Solvency (end of year at market)								
Number of sole proprietors	216	41	7	36	22	47	14	37
Total farm assets	2,557,175	3,048,881	2,232,477	3,233,683	2,536,999	2,003,779	2,076,115	2,278,413
Total farm liabilities	981,490	1,070,688	1,159,895	1,237,746	1,058,091	780,287	628,293	875,191
Total assets	2,830,336	3,495,608	2,438,924	3,502,618	2,775,217	2,207,745	2,293,282	2,509,868
Total liabilities	1,106,435	1,382,315	1,207,153	1,451,460	1,135,347	835,195	659,366	904,942
Net worth	1,723,901	2,113,293	1,231,771	2,051,158	1,639,870	1,372,550	1,633,916	1,604,926
Net worth change	296,471	278,830	184,087	257,297	515,796	220,289	306,614	333,063
Farm debt to asset ratio	38 %	35 %	52 %	38 %	42 %	39 %	30 %	38 %
Total debt to asset ratio	39 %	40 %	49 %	41 %	41 %	38 %	29 %	36 %
Nonfarm Information								
Net nonfarm income	19,431	20,376	18,600	18,100	9,652	23,181	32,646	19,520
Crop Acres								
Total acres owned	389	291	402	501	421	326	302	402
Total crop acres	1,755	1,773	1,909	2,116	2,221	1,134	1,761	1,537
Total crop acres owned	381	277	503	424	526	307	231	384
Total crop acres cash rented	1,320	1,458	1,406	1,652	1,660	770	1,495	1,046
Total crop acres share rented	54	38	-	40	35	57	35	107

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.

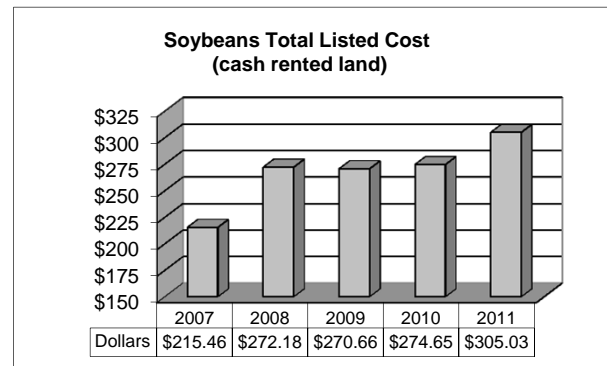
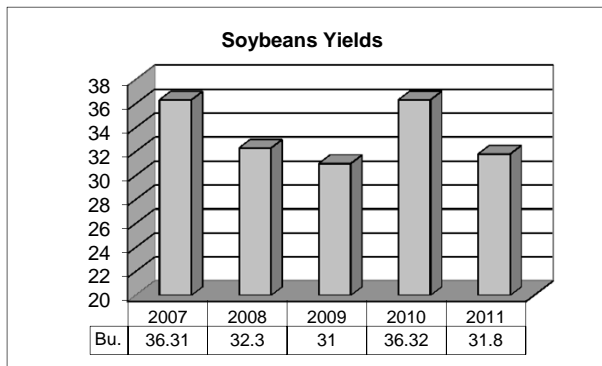
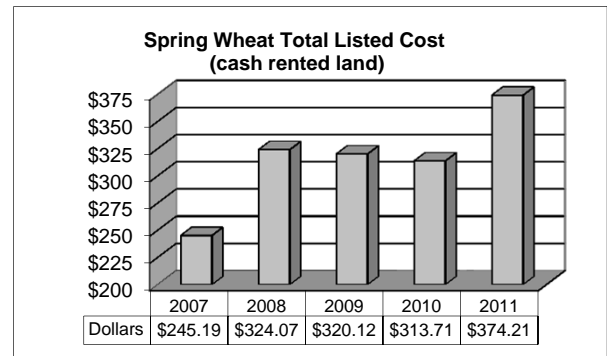
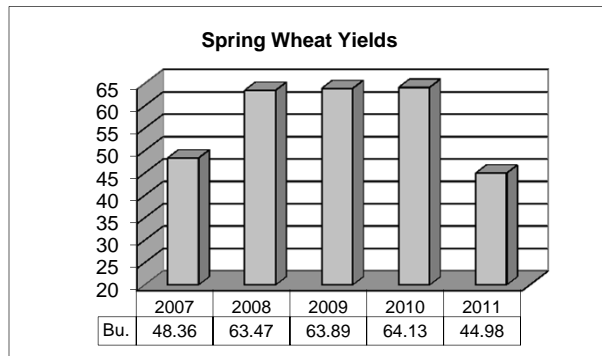
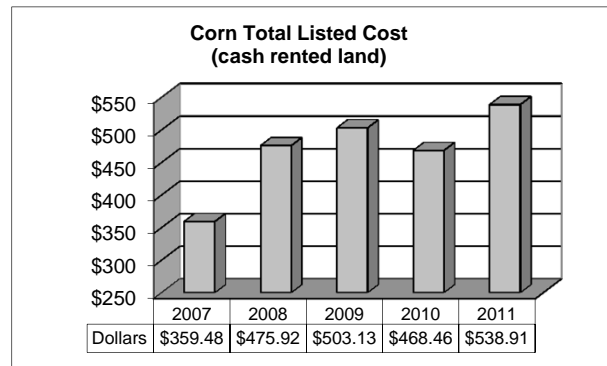
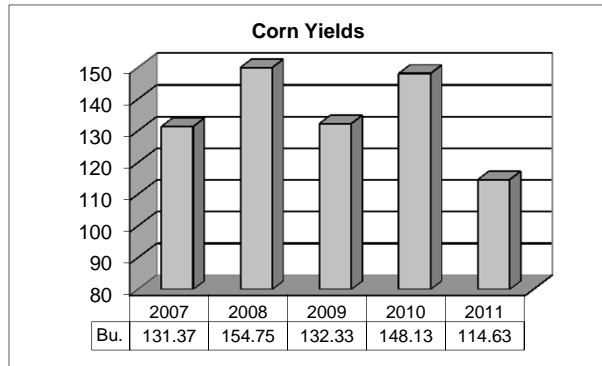
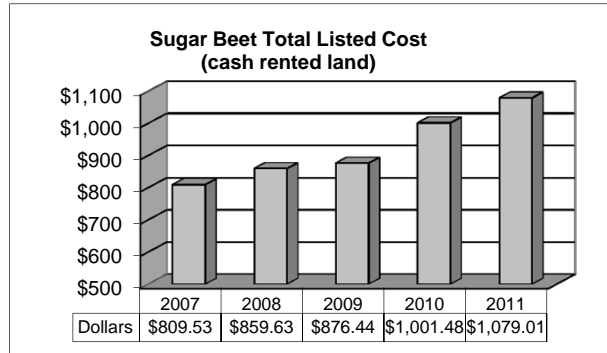
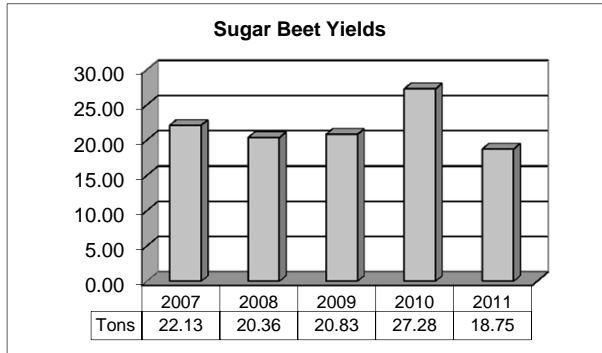
Several cost items, such as "utilities," "hired labor," and "interest paid," are listed under both "direct" and "overhead" costs because some of these costs are specific to that crop whereas others are general overhead costs of the farm. For example, "Machinery leases" as a direct expense refers to machinery 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



Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(Farms Sorted By Net Return)

Corn on Owned Land

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	83	15	19	20
Number of farms	72	14	15	15
Acres	190.76	204.95	195.50	148.19
Yield per acre (bu.)	113.29	91.36	113.40	148.51
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.66	5.25	5.54	5.89
Total product return per acre	641.76	479.77	628.11	874.94
Crop insurance per acre	46.26	60.44	54.21	3.72
Other crop income per acre	0.93	-	2.29	1.79
Gross return per acre	688.95	540.22	684.60	880.45
Direct Expenses				
Seed	83.54	80.15	85.32	79.44
Fertilizer	125.94	126.97	139.42	120.95
Crop chemicals	17.30	18.46	15.72	16.96
Crop insurance	27.06	29.58	29.47	22.80
Drying expense	3.47	3.31	3.36	2.95
Fuel & oil	32.51	35.67	31.17	33.57
Repairs	41.44	41.58	37.29	42.15
Custom hire	5.66	0.74	2.26	4.32
Operating interest	5.61	5.77	4.79	4.82
Miscellaneous	0.73	0.83	0.21	1.26
Total direct expenses per acre	343.58	343.06	349.96	329.36
Return over direct exp per acre	345.37	197.15	334.64	551.09
Overhead Expenses				
Custom hire	4.12	6.02	2.04	2.45
Hired labor	18.21	23.28	18.79	14.66
Machinery leases	3.18	4.42	2.67	0.63
Building leases	0.93	2.19	0.91	0.04
RE & pers. property taxes	15.05	15.77	17.71	14.67
Farm insurance	6.91	7.36	7.37	6.01
Utilities	5.41	6.00	3.83	4.84
Dues & professional fees	4.70	5.92	4.88	3.71
Interest	46.30	51.58	44.59	59.84
Mach & bldg depreciation	46.37	53.78	46.76	38.11
Miscellaneous	4.18	5.85	3.35	4.15
Total overhead expenses per acre	155.36	182.16	152.91	149.11
Total dir & ovhd expenses per acre	498.94	525.23	502.87	478.47
Net return per acre	190.01	14.99	181.73	401.98
Government payments	13.40	12.76	15.67	13.07
Net return with govt pmts	203.41	27.75	197.40	415.06
Labor & management charge	49.07	50.91	49.05	50.46
Net return over lbr & mgt	154.34	-23.17	148.35	364.60
Cost of Production				
Total direct expense per bu.	3.03	3.75	3.09	2.22
Total dir & ovhd exp per bu.	4.40	5.75	4.43	3.22
Less govt & other income	3.87	4.95	3.80	3.10
With labor & management	4.30	5.50	4.23	3.44
Net value per unit	5.66	5.25	5.54	5.89
Machinery cost per acre	134.78	146.11	122.92	121.47
Est. labor hours per acre	2.23	2.74	1.95	2.33

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	162	24	34	38
Number of farms	122	24	25	25
Acres	378.30	414.33	328.19	227.99
Yield per acre (bu.)	114.59	86.98	116.17	144.32
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.75	5.45	5.60	5.89
Total product return per acre	658.41	473.99	650.62	849.93
Hedging gains/losses per acre	-1.29	-0.27	-	-
Crop insurance per acre	35.80	57.85	18.79	4.12
Other crop income per acre	0.76	0.47	3.24	0.53
Gross return per acre	693.69	532.03	672.65	854.57
Direct Expenses				
Seed	85.50	89.14	83.70	84.30
Fertilizer	122.74	130.91	132.12	124.14
Crop chemicals	20.52	18.27	17.54	19.55
Crop insurance	29.46	29.90	29.37	25.61
Drying expense	3.54	4.05	2.41	1.85
Fuel & oil	33.28	31.23	28.39	35.00
Repairs	39.75	47.24	41.18	42.49
Custom hire	2.68	3.75	0.60	3.60
Land rent	96.02	102.44	92.72	86.85
Machinery leases	1.93	3.11	0.49	0.48
Operating interest	5.43	9.52	5.32	4.15
Miscellaneous	1.57	0.65	0.27	1.27
Total direct expenses per acre	442.38	470.21	434.10	429.29
Return over direct exp per acre	251.30	61.82	238.55	425.28
Overhead Expenses				
Custom hire	6.75	2.83	2.01	6.48
Hired labor	17.04	17.76	16.16	11.16
Machinery leases	8.14	6.17	6.41	6.22
Building leases	1.37	3.78	1.44	0.81
Farm insurance	7.29	6.57	6.21	5.50
Utilities	4.77	4.63	3.85	4.54
Dues & professional fees	3.50	4.71	4.72	3.15
Interest	6.84	5.87	6.15	4.54
Mach & bldg depreciation	37.53	39.19	32.21	34.29
Miscellaneous	3.31	4.61	2.42	1.92
Total overhead expenses per acre	96.53	96.12	81.57	78.61
Total dir & ovhd expenses per acre	538.91	566.33	515.67	507.90
Net return per acre	154.78	-34.30	156.99	346.67
Government payments	12.64	11.79	13.73	13.44
Net return with govt pmts	167.41	-22.51	170.71	360.11
Labor & management charge	47.55	49.53	46.23	50.48
Net return over lbr & mgt	119.86	-72.03	124.49	309.62
Cost of Production				
Total direct expense per bu.	3.86	5.41	3.74	2.97
Total dir & ovhd exp per bu.	4.70	6.51	4.44	3.52
Less govt & other income	4.28	5.71	4.13	3.39
With labor & management	4.70	6.28	4.53	3.74
Net value per unit	5.73	5.45	5.60	5.89
Machinery cost per acre	133.86	136.82	114.76	129.96
Est. labor hours per acre	2.14	2.24	1.68	2.11

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(Farms Sorted By Net Return)

Corn on Share Rent

	<u>Avg. Of All Farms</u>
Number of fields	15
Number of farms	10
Acres	142.59
Yield per acre (bu.)	128.82
Operators share of yield %	67.98
Value per bu.	5.86
Total product return per acre	512.92
Crop insurance per acre	6.28
Other crop income per acre	8.40
Gross return per acre	527.60
Direct Expenses	
Seed	82.30
Fertilizer	125.80
Crop chemicals	14.76
Crop insurance	21.57
Drying expense	5.49
Fuel & oil	34.62
Repairs	47.72
Custom hire	0.73
Hired labor	0.52
Operating interest	3.89
Miscellaneous	0.75
Total direct expenses per acre	338.15
Return over direct exp per acre	189.45
Overhead Expenses	
Custom hire	0.77
Hired labor	14.85
Machinery leases	1.27
Building leases	0.77
Farm insurance	8.20
Utilities	5.24
Dues & professional fees	2.48
Interest	7.06
Mach & bldg depreciation	37.32
Miscellaneous	2.48
Total overhead expenses per acre	80.45
Total dir & ovhd expenses per acre	418.60
Net return per acre	109.00
Government payments	8.46
Net return with govt pmts	117.46
Labor & management charge	39.66
Net return over lbr & mgt	77.80
Cost of Production	
Total direct expense per bu.	3.86
Total dir & ovhd exp per bu.	4.78
Less govt & other income	4.52
With labor & management	4.97
Net value per unit	5.86
Machinery cost per acre	126.05
Est. labor hours per acre	2.12

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	155	26	30	31
Number of farms	127	25	26	26
Acres	210.28	146.14	360.60	223.70
Yield per acre (bu.)	32.94	26.75	30.81	38.20
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	11.45	11.32	11.27	11.95
Total product return per acre	377.10	302.71	347.30	456.60
Hedging gains/losses per acre	-0.79	-	-1.77	-
Crop insurance per acre	25.51	24.02	33.21	29.35
Other crop income per acre	0.69	0.90	0.07	1.94
Gross return per acre	402.51	327.63	378.81	487.90
Direct Expenses				
Seed	55.04	54.79	51.10	56.68
Fertilizer	9.86	19.39	7.75	6.71
Crop chemicals	17.64	17.37	17.68	17.67
Crop insurance	21.22	22.71	18.79	21.11
Fuel & oil	19.79	22.36	19.36	19.73
Repairs	22.92	25.82	19.33	22.47
Custom hire	2.68	7.18	1.46	3.76
Hired labor	0.12	-	-	0.56
Machinery leases	0.43	1.56	0.10	0.01
Operating interest	3.30	6.19	2.62	2.76
Miscellaneous	0.57	0.43	0.31	1.26
Total direct expenses per acre	153.58	177.81	138.50	152.72
Return over direct exp per acre	248.93	149.82	240.31	335.18
Overhead Expenses				
Custom hire	3.03	5.52	4.12	1.89
Hired labor	10.64	6.38	12.69	13.25
Machinery leases	3.18	3.85	6.07	0.89
Building leases	0.50	0.68	0.25	0.23
RE & pers. property taxes	16.12	14.23	16.60	17.43
Farm insurance	7.19	7.39	6.80	6.82
Utilities	3.69	4.61	3.28	3.74
Dues & professional fees	3.82	4.09	3.60	3.96
Interest	37.42	61.09	35.80	25.37
Mach & bldg depreciation	24.86	25.02	21.99	28.64
Miscellaneous	3.85	5.36	2.43	4.43
Total overhead expenses per acre	114.30	138.21	113.62	106.65
Total dir & ovhd expenses per acre	267.88	316.03	252.13	259.37
Net return per acre	134.63	11.60	126.68	228.53
Government payments	12.68	12.95	10.95	13.75
Net return with govt pmts	147.31	24.56	137.63	242.28
Labor & management charge	28.20	32.78	24.75	29.36
Net return over lbr & mgt	119.11	-8.23	112.88	212.92
Cost of Production				
Total direct expense per bu.	4.66	6.65	4.50	4.00
Total dir & ovhd exp per bu.	8.13	11.81	8.18	6.79
Less govt & other income	6.98	10.40	6.81	5.61
With labor & management	7.83	11.62	7.61	6.38
Net value per unit	11.43	11.32	11.22	11.95
Machinery cost per acre	80.21	94.07	77.73	78.49
Est. labor hours per acre	1.36	1.55	1.34	1.29

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(Farms Sorted By Net Return)

Soybeans on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	276	55	52	56
Number of farms	185	37	37	37
Acres	402.20	418.91	444.19	278.96
Yield per acre (bu.)	31.32	25.29	33.71	38.07
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	11.42	11.32	11.31	11.82
Total product return per acre	357.67	286.26	381.14	449.93
Hedging gains/losses per acre	-0.77	-2.13	-0.78	-
Crop insurance per acre	30.15	46.36	18.04	25.02
Other crop income per acre	0.50	-	0.81	0.54
Gross return per acre	387.55	330.49	399.21	475.49
Direct Expenses				
Seed	54.79	56.10	53.22	54.62
Fertilizer	9.07	11.41	10.06	3.91
Crop chemicals	18.31	17.51	18.15	19.08
Crop insurance	22.44	23.35	24.62	21.55
Fuel & oil	19.05	19.82	18.44	18.07
Repairs	22.66	24.43	21.00	21.72
Custom hire	2.52	1.54	3.21	3.15
Land rent	93.45	99.28	97.67	87.43
Machinery leases	0.61	0.23	0.06	0.32
Operating interest	3.08	4.63	2.69	2.20
Miscellaneous	0.64	0.83	0.50	1.17
Total direct expenses per acre	246.62	259.13	249.62	233.24
Return over direct exp per acre	140.93	71.36	149.59	242.25
Overhead Expenses				
Custom hire	2.51	2.80	2.26	2.48
Hired labor	10.05	11.75	9.36	9.22
Machinery leases	2.72	4.22	2.02	1.51
Building leases	0.74	1.42	0.46	0.47
Farm insurance	5.53	5.51	6.34	4.80
Utilities	3.40	3.33	3.69	3.56
Dues & professional fees	3.34	3.53	3.46	4.11
Interest	3.97	4.79	3.62	3.27
Mach & bldg depreciation	22.98	26.02	21.29	24.19
Miscellaneous	3.18	4.13	3.16	2.52
Total overhead expenses per acre	58.41	67.49	55.66	56.11
Total dir & ovhd expenses per acre	305.03	326.63	305.28	289.35
Net return per acre	82.52	3.87	93.92	186.14
Government payments	13.01	12.22	13.37	13.04
Net return with govt pmts	95.53	16.08	107.29	199.18
Labor & management charge	28.28	27.89	28.25	28.08
Net return over lbr & mgt	67.25	-11.81	79.04	171.10
Cost of Production				
Total direct expense per bu.	7.87	10.25	7.41	6.13
Total dir & ovhd exp per bu.	9.74	12.91	9.06	7.60
Less govt & other income	8.37	10.68	8.12	6.59
With labor & management	9.27	11.79	8.96	7.32
Net value per unit	11.39	11.23	11.28	11.82
Machinery cost per acre	75.49	82.18	70.57	73.76
Est. labor hours per acre	1.32	1.46	1.20	1.23

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(Farms Sorted By Net Return)

Soybeans on Share Rent

	<u>Avg. Of All Farms</u>
Number of fields	33
Number of farms	23
Acres	148.87
Yield per acre (bu.)	35.40
Operators share of yield %	61.07
Value per bu.	11.35
Total product return per acre	245.43
Hedging gains/losses per acre	-1.14
Crop insurance per acre	12.31
Other crop income per acre	1.63
Gross return per acre	258.23
Direct Expenses	
Seed	50.78
Fertilizer	9.99
Crop chemicals	16.33
Crop insurance	19.23
Fuel & oil	19.54
Repairs	23.66
Custom hire	1.95
Operating interest	3.67
Miscellaneous	0.42
Total direct expenses per acre	145.57
Return over direct exp per acre	112.66
Overhead Expenses	
Custom hire	0.32
Hired labor	5.68
Machinery leases	0.51
Building leases	0.40
Farm insurance	5.43
Utilities	3.97
Dues & professional fees	3.10
Interest	3.25
Mach & bldg depreciation	22.96
Miscellaneous	4.12
Total overhead expenses per acre	49.74
Total dir & ovhd expenses per acre	195.31
Net return per acre	62.92
Government payments	9.13
Net return with govt pmts	72.06
Labor & management charge	29.54
Net return over lbr & mgt	42.52
Cost of Production	
Total direct expense per bu.	6.73
Total dir & ovhd exp per bu.	9.04
Less govt & other income	8.02
With labor & management	9.39
Net value per unit	11.30
Machinery cost per acre	70.99
Est. labor hours per acre	1.32

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(Farms Sorted By Net Return)

Soybeans, Food on Cash Rent

	<u>Avg. Of All Farms</u>
Number of fields	16
Number of farms	9
Acres	207.24
Yield per acre (bu.)	26.73
Operators share of yield %	100.00
Value per bu.	13.74
Total product return per acre	367.27
Hedging gains/losses per acre	0.51
Crop insurance per acre	55.54
Other crop income per acre	0.23
Gross return per acre	423.55
Direct Expenses	
Seed	19.46
Fertilizer	10.56
Crop chemicals	43.06
Crop insurance	24.14
Fuel & oil	18.76
Repairs	24.93
Custom hire	4.36
Land rent	92.77
Machinery leases	4.52
Operating interest	2.18
Miscellaneous	0.47
Total direct expenses per acre	245.21
Return over direct exp per acre	178.33
Overhead Expenses	
Custom hire	4.28
Hired labor	5.07
Machinery leases	1.56
Building leases	2.35
Farm insurance	4.21
Utilities	4.61
Dues & professional fees	3.75
Interest	4.46
Mach & bldg depreciation	21.32
Miscellaneous	1.95
Total overhead expenses per acre	53.55
Total dir & ovhd expenses per acre	298.76
Net return per acre	124.79
Government payments	12.77
Net return with govt pmts	137.55
Labor & management charge	31.25
Net return over lbr & mgt	106.30
Cost of Production	
Total direct expense per bu.	9.18
Total dir & ovhd exp per bu.	11.18
Less govt & other income	8.60
With labor & management	9.76
Net value per unit	13.76
Machinery cost per acre	81.27
Est. labor hours per acre	1.29

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(Farms Sorted By Net Return)

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 fields	58	8	15	12
Number of farms	41	8	8	9
Acres	104.80	137.13	92.60	121.15
Yield per acre (ton)	20.03	11.88	18.96	25.90
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	59.47	52.03	60.21	61.63
Total product return per acre	1,191.04	618.42	1,141.66	1,596.08
Crop insurance per acre	58.04	215.44	19.59	-
Other crop income per acre	5.21	2.04	12.38	6.88
Gross return per acre	1,254.29	835.89	1,173.63	1,602.95
Direct Expenses				
Seed	152.19	183.12	156.92	140.12
Fertilizer	93.09	92.58	91.01	90.91
Crop chemicals	95.13	68.50	99.59	99.90
Crop insurance	23.80	23.51	20.25	24.68
Fuel & oil	85.14	67.19	99.88	87.04
Repairs	103.27	126.36	106.06	75.12
Custom hire	7.76	0.59	7.78	15.25
Hired labor	33.88	41.84	42.26	28.65
Hauling and trucking	10.97	-	12.23	11.31
Operating interest	12.55	11.13	26.62	2.24
Miscellaneous	6.74	-	-	22.79
Total direct expenses per acre	624.53	614.81	662.59	598.02
Return over direct exp per acre	629.75	221.09	511.04	1,004.93
Overhead Expenses				
Custom hire	5.27	6.80	1.03	6.77
Hired labor	48.12	39.81	67.85	44.91
Machinery leases	1.79	1.21	0.20	2.59
Building leases	2.72	-	0.24	10.21
RE & pers. property taxes	17.81	23.71	9.40	18.18
Farm insurance	17.11	5.56	19.25	22.77
Utilities	11.20	12.29	12.60	11.51
Dues & professional fees	6.79	5.28	7.87	6.50
Interest	34.81	63.31	22.47	18.17
Mach & bldg depreciation	117.54	105.61	116.62	123.26
Miscellaneous	13.17	2.71	14.90	21.84
Total overhead expenses per acre	276.33	266.29	272.44	286.71
Total dir & ovhd expenses per acre	900.86	881.10	935.04	884.74
Net return per acre	353.42	-45.20	238.59	718.22
Government payments	13.57	12.26	15.00	12.92
Net return with govt pmts	366.99	-32.94	253.59	731.13
Labor & management charge	127.20	120.86	111.78	162.37
Net return over lbr & mgt	239.79	-153.80	141.81	568.76
Cost of Production				
Total direct expense per ton	31.18	51.73	34.94	23.09
Total dir & ovhd exp per ton	44.98	74.14	49.31	34.16
Less govt & other income	41.15	54.81	46.83	33.40
With labor & management	47.50	64.98	52.73	39.67
Net value per unit	59.47	52.03	60.21	61.63
Machinery cost per acre	325.02	312.61	338.26	308.68
Est. labor hours per acre	6.07	5.55	7.18	6.02

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(Farms Sorted By Net Return)

Sugar Beets on Owned Land Including 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	27	5	5	7
Number of farms	26	5	5	6
Acres	98.77	61.82	140.80	86.13
Yield per acre (ton)	18.78	12.62	17.67	24.40
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	60.87	54.03	59.55	62.97
Total product return per acre	1,143.14	682.11	1,051.91	1,536.47
Crop insurance per acre	44.16	102.38	30.61	-
Other crop income per acre	1.73	-	3.33	3.89
Gross return per acre	1,189.04	784.48	1,085.85	1,540.36
Direct Expenses				
Seed	159.21	162.53	170.07	138.94
Fertilizer	103.25	83.35	99.01	101.75
Crop chemicals	87.23	74.57	68.73	117.98
Crop insurance	24.42	23.14	24.49	24.16
Fuel & oil	85.85	69.87	79.84	75.50
Repairs	101.92	91.57	84.77	85.65
Custom hire	15.27	20.17	29.35	0.37
Hired labor	23.33	22.17	26.68	11.76
Stock/quota lease	279.87	298.83	292.43	302.99
Hauling and trucking	8.12	12.82	-	20.03
Operating interest	16.04	13.58	17.28	14.81
Miscellaneous	5.27	-	17.23	3.18
Total direct expenses per acre	909.79	872.59	909.90	897.12
Return over direct exp per acre	279.25	-88.11	175.95	643.23
Overhead Expenses				
Custom hire	12.89	13.27	8.06	29.06
Hired labor	36.36	30.80	38.69	46.82
Machinery leases	9.61	4.30	4.75	14.18
RE & pers. property taxes	17.44	10.39	17.05	22.48
Farm insurance	10.44	4.93	6.29	6.95
Utilities	5.64	8.72	3.19	4.07
Dues & professional fees	6.17	2.42	2.64	7.80
Interest	55.30	42.36	60.10	46.57
Mach & bldg depreciation	90.32	57.74	89.07	91.64
Miscellaneous	9.84	14.65	4.27	2.88
Total overhead expenses per acre	253.99	189.58	234.10	272.44
Total dir & ovhd expenses per acre	1,163.78	1,062.17	1,144.01	1,169.57
Net return per acre	25.26	-277.69	-58.15	370.79
Government payments	13.32	13.06	12.62	14.15
Net return with govt pmts	38.58	-264.63	-45.53	384.94
Labor & management charge	113.35	89.62	105.49	123.75
Net return over lbr & mgt	-74.77	-354.25	-151.02	261.20
Cost of Production				
Total direct expense per ton	48.44	69.12	51.51	36.76
Total dir & ovhd exp per ton	61.97	84.14	64.76	47.93
Less govt & other income	58.81	74.99	62.12	47.19
With labor & management	64.85	82.09	68.10	52.26
Net value per unit	60.87	54.03	59.55	62.97
Machinery cost per acre	321.90	250.50	296.65	303.99
Est. labor hours per acre	5.15	4.85	4.48	4.67

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	12	19	19
Number of farms	60	12	12	12
Acres	154.97	280.93	79.18	106.82
Yield per acre (ton)	18.91	12.09	20.67	25.86
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	59.23	55.69	62.31	62.10
Total product return per acre	1,119.97	673.08	1,287.79	1,606.05
Crop insurance per acre	79.93	193.67	10.87	1.97
Other crop income per acre	3.13	0.89	10.39	3.70
Gross return per acre	1,203.03	867.64	1,309.05	1,611.71
Direct Expenses				
Seed	153.37	169.72	138.92	121.85
Fertilizer	97.15	102.50	102.88	91.92
Crop chemicals	91.41	74.85	105.83	123.84
Crop insurance	23.99	24.08	22.12	22.97
Fuel & oil	83.62	74.07	92.52	84.21
Repairs	102.08	103.77	126.49	79.44
Custom hire	10.70	11.04	9.63	12.80
Hired labor	29.74	30.51	27.03	28.83
Land rent	109.74	110.39	111.73	99.40
Machinery leases	1.23	-	-	0.22
Hauling and trucking	6.15	0.03	6.18	13.13
Operating interest	11.47	12.79	19.56	2.46
Miscellaneous	2.99	0.04	4.24	3.73
Total direct expenses per acre	723.64	713.79	767.11	684.81
Return over direct exp per acre	479.39	153.85	541.94	926.91
Overhead Expenses				
Custom hire	4.28	1.40	0.33	4.55
Hired labor	63.25	77.07	76.60	45.28
Machinery leases	5.68	8.26	4.03	5.50
Building leases	2.56	-	0.14	12.43
Farm insurance	13.72	8.46	13.27	20.51
Utilities	9.56	8.32	14.01	12.57
Dues & professional fees	5.50	5.10	7.86	5.68
Interest	13.70	18.68	15.18	5.50
Mach & bldg depreciation	98.55	94.63	86.48	123.49
Miscellaneous	7.30	3.68	7.47	15.63
Total overhead expenses per acre	224.10	225.58	225.37	251.13
Total dir & ovhd expenses per acre	947.74	939.38	992.48	935.94
Net return per acre	255.29	-71.74	316.57	675.78
Government payments	12.86	11.55	14.23	13.93
Net return with govt pmts	268.15	-60.19	330.80	689.71
Labor & management charge	130.60	115.01	111.83	163.62
Net return over lbr & mgt	137.55	-175.20	218.97	526.09
Cost of Production				
Total direct expense per ton	38.27	59.06	37.12	26.48
Total dir & ovhd exp per ton	50.12	77.72	48.02	36.19
Less govt & other income	45.05	60.67	46.30	35.43
With labor & management	51.96	70.18	51.72	41.76
Net value per unit	59.23	55.69	62.31	62.10
Machinery cost per acre	315.27	308.83	332.96	309.37
Est. labor hours per acre	6.31	6.88	6.72	5.87

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	87	17	15	15
Number of farms	58	11	11	12
Acres	192.28	227.39	154.41	183.28
Yield per acre (ton)	18.11	16.20	18.05	22.66
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	59.51	53.12	59.12	62.11
Total product return per acre	1,077.51	860.72	1,067.19	1,407.08
Crop insurance per acre	103.97	99.74	153.02	14.74
Other crop income per acre	3.12	0.16	4.77	2.89
Gross return per acre	1,184.60	960.62	1,224.98	1,424.72
Direct Expenses				
Seed	159.05	166.99	169.00	122.68
Fertilizer	96.93	93.01	95.35	105.73
Crop chemicals	82.64	77.75	70.30	94.03
Crop insurance	26.20	26.41	23.94	23.37
Fuel & oil	78.70	82.63	87.41	74.19
Repairs	94.96	95.28	121.83	74.46
Custom hire	8.50	3.14	3.44	22.39
Hired labor	25.80	27.31	25.40	21.00
Land rent	106.42	119.40	94.36	94.37
Stock/quota lease	277.82	280.20	285.87	239.91
Machinery leases	0.39	0.30	-	1.93
Hauling and trucking	9.53	8.15	12.08	3.46
Operating interest	16.09	24.04	16.90	6.07
Miscellaneous	2.10	0.12	3.60	5.04
Total direct expenses per acre	985.13	1,004.75	1,009.47	888.62
Return over direct exp per acre	199.47	-44.12	215.51	536.10
Overhead Expenses				
Custom hire	6.74	3.69	10.87	7.81
Hired labor	43.61	49.50	39.88	49.27
Machinery leases	11.75	21.11	14.31	11.02
Building leases	1.63	0.38	0.27	4.46
Farm insurance	8.71	9.80	6.79	11.75
Utilities	6.74	10.06	5.50	7.94
Dues & professional fees	5.64	5.94	3.88	7.12
Interest	17.79	36.75	12.87	9.41
Mach & bldg depreciation	80.87	79.53	62.16	83.14
Miscellaneous	8.92	4.16	5.93	7.97
Total overhead expenses per acre	192.38	220.93	162.45	199.90
Total dir & ovhd expenses per acre	1,177.51	1,225.68	1,171.92	1,088.52
Net return per acre	7.09	-265.06	53.06	336.19
Government payments	12.45	12.03	13.31	12.55
Net return with govt pmts	19.54	-253.03	66.37	348.74
Labor & management charge	110.46	107.22	111.85	135.91
Net return over lbr & mgt	-90.92	-360.25	-45.48	212.83
Cost of Production				
Total direct expense per ton	54.41	62.01	55.92	39.22
Total dir & ovhd exp per ton	65.03	75.65	64.92	48.05
Less govt & other income	58.43	68.74	55.45	46.71
With labor & management	64.53	75.36	61.64	52.71
Net value per unit	59.51	53.12	59.12	62.11
Machinery cost per acre	295.62	317.73	311.00	283.40
Est. labor hours per acre	5.26	5.51	4.75	4.99

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	110	20	25	22
Number of farms	86	17	17	18
Acres	165.61	150.06	158.09	194.37
Yield per acre (bu.)	46.33	33.89	43.15	57.56
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	7.95	7.89	7.89	8.36
Total product return per acre	368.16	267.29	340.46	480.94
Hedging gains/losses per acre	-0.59	-	-	-
Crop insurance per acre	32.56	47.57	48.44	19.28
Other crop income per acre	0.84	-	0.11	3.49
Gross return per acre	400.98	314.87	389.01	503.71
Direct Expenses				
Seed	23.43	23.48	22.94	21.68
Fertilizer	96.35	110.95	102.22	92.61
Crop chemicals	31.07	23.52	25.52	42.22
Crop insurance	20.83	20.19	22.98	20.93
Fuel & oil	19.30	18.78	17.45	20.11
Repairs	23.28	23.01	23.29	20.46
Custom hire	4.73	3.08	3.48	4.19
Hired labor	0.18	0.27	-	0.57
Machinery leases	0.37	1.54	-	-
Operating interest	3.46	4.27	3.78	4.40
Miscellaneous	1.02	0.33	0.72	2.75
Total direct expenses per acre	224.01	229.41	222.38	229.92
Return over direct exp per acre	176.97	85.45	166.63	273.79
Overhead Expenses				
Custom hire	3.55	4.16	5.17	2.74
Hired labor	10.23	8.87	6.23	16.09
Machinery leases	1.39	2.42	2.00	1.39
Building leases	0.95	2.56	0.60	0.51
RE & pers. property taxes	15.07	18.16	16.44	13.56
Farm insurance	6.58	6.98	5.88	5.51
Utilities	3.41	3.61	3.14	2.88
Dues & professional fees	3.16	2.72	3.35	2.98
Interest	28.74	41.59	29.93	25.23
Mach & bldg depreciation	25.36	25.67	27.17	25.71
Miscellaneous	4.43	7.69	3.56	3.23
Total overhead expenses per acre	102.86	124.44	103.46	99.82
Total dir & ovhd expenses per acre	326.87	353.86	325.84	329.74
Net return per acre	74.11	-38.99	63.17	173.97
Government payments	13.39	14.27	12.80	14.99
Net return with govt pmts	87.50	-24.72	75.96	188.96
Labor & management charge	27.82	28.05	27.43	26.47
Net return over lbr & mgt	59.68	-52.76	48.53	162.50
Cost of Production				
Total direct expense per bu.	4.83	6.77	5.15	3.99
Total dir & ovhd exp per bu.	7.05	10.44	7.55	5.73
Less govt & other income	6.06	8.62	6.13	5.07
With labor & management	6.66	9.44	6.76	5.53
Net value per unit	7.93	7.89	7.89	8.36
Machinery cost per acre	80.08	81.02	81.72	75.93
Est. labor hours per acre	1.41	1.35	1.31	1.48

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(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	202	39	39	38
Number of farms	134	26	27	27
Acres	288.12	259.08	283.53	371.46
Yield per acre (bu.)	44.49	33.25	39.84	55.75
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.02	7.62	8.23	8.14
Total product return per acre	356.99	253.43	327.98	453.67
Hedging gains/losses per acre	-2.84	-10.06	-5.54	-
Crop insurance per acre	39.02	56.12	54.38	22.47
Other crop income per acre	0.40	0.11	0.36	1.13
Gross return per acre	393.56	299.60	377.18	477.28
Direct Expenses				
Seed	24.83	24.51	25.49	23.44
Fertilizer	96.04	99.58	86.64	97.95
Crop chemicals	29.33	27.89	23.20	34.64
Crop insurance	21.79	23.57	22.21	20.92
Drying expense	0.38	0.60	0.80	0.10
Fuel & oil	19.93	18.65	21.21	19.66
Repairs	23.06	23.99	26.52	21.09
Custom hire	4.31	3.28	4.18	5.01
Land rent	89.46	105.28	94.99	82.33
Machinery leases	0.65	0.90	-	1.41
Operating interest	3.70	3.19	2.39	2.47
Miscellaneous	1.06	1.01	0.52	1.32
Total direct expenses per acre	314.54	332.46	308.15	310.35
Return over direct exp per acre	79.02	-32.87	69.03	166.93
Overhead Expenses				
Custom hire	3.36	2.29	2.16	3.36
Hired labor	10.74	10.91	15.29	9.43
Machinery leases	2.06	1.96	0.79	1.82
Building leases	0.77	1.83	0.17	0.92
Farm insurance	5.78	6.21	7.41	4.42
Utilities	3.20	3.10	3.70	2.58
Dues & professional fees	2.79	3.23	2.44	2.33
Interest	3.97	3.98	3.32	2.27
Mach & bldg depreciation	23.62	24.22	22.60	23.37
Miscellaneous	3.37	4.44	3.41	2.73
Total overhead expenses per acre	59.67	62.18	61.29	53.23
Total dir & ovhd expenses per acre	374.21	394.64	369.44	363.58
Net return per acre	19.35	-95.05	7.74	113.70
Government payments	13.29	12.66	13.27	13.74
Net return with govt pmts	32.64	-82.39	21.01	127.44
Labor & management charge	28.07	25.83	29.75	28.50
Net return over lbr & mgt	4.57	-108.22	-8.75	98.94
Cost of Production				
Total direct expense per bu.	7.07	10.00	7.73	5.57
Total dir & ovhd exp per bu.	8.41	11.87	9.27	6.52
Less govt & other income	7.29	10.10	7.70	5.85
With labor & management	7.92	10.88	8.45	6.36
Net value per unit	7.96	7.32	8.09	8.14
Machinery cost per acre	79.58	77.70	79.45	77.03
Est. labor hours per acre	1.33	1.28	1.50	1.23

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Management Education
Red River Valley, 2011
(Farms Sorted By Net Return)

Wheat, Spring on Share Rent

	<u>Avg. Of All Farms</u>
Number of fields	23
Number of farms	17
Acres	126.29
Yield per acre (bu.)	46.01
Operators share of yield %	62.47
Value per bu.	7.96
Total product return per acre	228.63
Crop insurance per acre	19.70
Other crop income per acre	2.39
Gross return per acre	250.72
Direct Expenses	
Seed	22.35
Fertilizer	76.82
Crop chemicals	24.26
Crop insurance	12.29
Fuel & oil	18.70
Repairs	20.82
Custom hire	4.81
Operating interest	2.45
Miscellaneous	0.47
Total direct expenses per acre	182.97
Return over direct exp per acre	67.75
Overhead Expenses	
Custom hire	0.44
Hired labor	6.38
Machinery leases	0.42
Building leases	1.58
Farm insurance	5.76
Utilities	3.63
Dues & professional fees	3.48
Interest	3.24
Mach & bldg depreciation	23.43
Miscellaneous	3.58
Total overhead expenses per acre	51.94
Total dir & ovhd expenses per acre	234.91
Net return per acre	15.81
Government payments	8.37
Net return with govt pmts	24.18
Labor & management charge	29.63
Net return over lbr & mgt	-5.45
Cost of Production	
Total direct expense per bu.	6.37
Total dir & ovhd exp per bu.	8.17
Less govt & other income	7.11
With labor & management	8.15
Net value per unit	7.96
Machinery cost per acre	70.66
Est. labor hours per acre	1.25

MyFarm Financial Scorecard

Year: _____

Name: _____

Liquidity	This Year	5-Year Ave	Strong	Vulnerable
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%