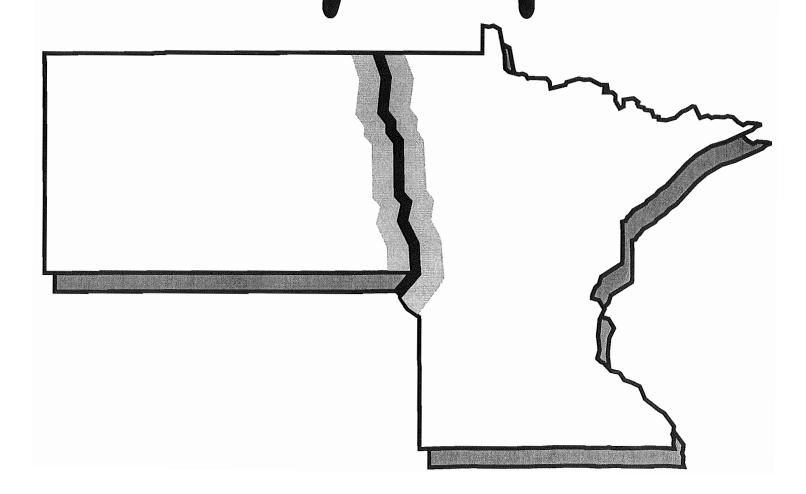
North Dakota Farm and Ranch Business Management Education



Minnesota
Farm Business
Management
Education

2004 Red River Valley Report



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

RED RIVER VALLEY AVERAGES 2004 ANNUAL REPORT

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A special acknowledgment is due Northland Community and Technical College, Thief River Falls, Minnesota, and the North Dakota State Board for Vocational and Technical Education for cooperation in the development of the eleventh annual Red River Valley Report.

2004 Red River Valley Report Minnesota and North Dakota Farm Business Management Education

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INTRODUCTION

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

The Red River Valley averages reports are divided into three major categories. Explanatory notes precede the farm operators' reports and the crop reports. Tables 1 through 12 present whole farm information. The table 13 series provide performance information on crop enterprises.

The 2004 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. Instructors pooled the individual business analysis and submitted the combined school data of farms located in the Red River Valley to a FINPACK Center located at North Dakota State University, where the comparison tables were generated. 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, 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. A state average book which includes all North Dakota farms excluding the Red River Valley is also available.

EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS

Tables 1 through 5 and 8 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. Table 6 and 7, the Comparative Financial Statement, on cost and market basis, respectively, includes 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 tables.

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

Tables 1. Detailed 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 Table 1 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. The "Direct & CC govt payments" are decoupled from crop production but the counter-cyclical payment is coupled to national average prices. "LDP payments" 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" refers to all other government payments such as disaster payments but not including CRP payments.

The second section of Table 1 lists <u>cash</u> expenses. "Labor" includes only labor hired. "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 Expenses" is the "Net Cash Farm Income." This is net farm income on a <u>cash</u> basis.

The last two sections of Table 1 deal with the non-cash changes in the farm business. The "Inventory Changes" and "Depreciation and Other Capital Adjustments" 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 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.

Table 2. Inventory Changes

This is the detailed statement of inventory changes that is summarized in Table 1. It includes beginning and ending inventories and the calculated changes.

Table 3. Depreciation and Other Capital Adjustments

This is the detailed statement of depreciation and other capital adjustments that is summarized in Table 1. It includes beginning and ending inventories, sales, purchases, and depreciation.

Table 4. Profitability Measures

Two sections on profitability are provided. The first section shows profitability when capital assets are valued at cost. Capital assets are valued at market in the second section. Therefore net farm income includes the change in market value of capital assets that occurred during the year.

Various measures of performance are calculated for the farms in this report. In Tables 1 through 3, no opportunity costs are used. In Table 4, opportunity costs for labor, capital, and management are used. The measures and their components are described below.

"Labor and management earnings" equals "Net farm income" from Table 1 minus an opportunity interest cost of 6% an average farm net worth.

"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."

"Interest on farm net worth" is the "Average farm equity" multiplied by a 6% opportunity interest cost charge.

"Farm interest expense" is the accrual interest cost, usually it will be different from the cash interest expense shown on Table 1.

"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 \$15,000 per full time operator plus 5% of value of farm production.

"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.

Table 5. Liquidity Measures

Liquidity: Cash Basis

"Family living and taxes" is calculated cash family living plus income and social security taxes.

"Cash available for intermediate debt" on the cash basis is the sum of "Net cash farm income" and "Net nonfarm income" minus "Family living and taxes" and "Real estate principal payments."

"Average intermediate debt" is the average of beginning and ending intermediate farm liabilities.

"Years to turn over debt" is "Average intermediate debt" divided by "Cash available for intermediate debt." If the cash-based or accrual-based "Cash available for intermediate debt" is a negative number, debt repayment is not possible because of negative cash flow on a cash or accrual basis, respectively, and "Years to turn over intermediate debt" cannot be calculated.

Cash "Expense as a percent of income" is "Total cash expense" divided by "Gross cash farm income."

"Interest as a percent of income" is "Interest paid" divided by "Gross cash farm income"

Liquidity: Accrual Basis

"Available for intermediate debt" on the accrual basis is "Net accrual operating income" plus "Net nonfarm income" minus "Family living and taxes" and "Real estate principal payments."

Accrual "Expense as a percent of income" is "Total cash expense" adjusted by inventory changes in accounts payable, accrued expense items, prepaid expenses and growing crops divided by "Gross farm income." "Gross farm revenue" is "Gross cash farm income" adjusted by changes in inventories of crops and feed, feeder livestock and accounts receivable.

"Interest as a percent of income" is "Interest paid" adjusted by changes in accrued interest for the year, divided by "Gross farm revenue."

Tables 6 and 7. Balance Sheet

The beginning and ending net worth statements and solvency measures are presented for sole proprietors only in Tables 6 and 7. Current assets are valued at market price at the time of the inventory which is January 1, and December 31, for the beginning and ending inventories respectively. In Table 6, 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 Table 7, the intermediate and long term assets are listed at market value, and deferred income tax liabilities are estimated.

Table 8. Statement of Cash Flows

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

Table 9. Financial Standards Measures

This table contains the 16 measures of financial performance recommended by the Farm Financial Standards Task Force (FFSTF). The Finpack financial management program used by the North Dakota Farm Business Education in most part, but not completely, complies with the FFSTF recommendations for calculating the financial guidelines measures. The measures are calculated on an accrual basis.

Liquidity

"Current ratio" is "Total current farm assets" divided by "Total current farm liabilities."

"Working capital" is "Total current farm assets" less "Total current farm liabilities."

Solvency

"Farm debt to asset ratio" is "Total farm liabilities" divided by "Total farm assets."

"Farm equity to asset ratio" is "Total farm assets" minus "Total farm liabilities," divided by "Total farm assets."

"Farm debt to equity ratio" is "Total farm liabilities," divided by the result of "Total farm assets" minus "Total farm liabilities."

Profitability

"Rate of return on farm assets" is "Net farm income" plus "interest expense" minus "Value of operator's labor and management," divided by the average of beginning and ending "Total farm assets."

"Rate of return on farm equity" is "Net farm income" minus "Value of operator's labor and management," divided by the average of beginning and ending farm net worth.

"Operating profit margin" is "Net farm income" plus "interest expense" minus "Value of operator's labor and management," divided by "Value of farm production."

Repayment Capacity

"Term debt coverage ratio" is "Net farm income" plus "depreciation and other capital adjustments" plus "Net nonfarm income" plus scheduled interest on term debt minus "Family living and taxes," divided by scheduled term debt principal and interest payments.

"Capital replacement margin" is "Net farm income" plus "Depreciation and other capital adjustments" plus "Net nonfarm income" minus "Family living and taxes" and scheduled term debt principal payments.

Efficiency

"Asset turnover rate" is "Value of farm production" divided by the average of beginning and ending "Total farm assets."

"Operating expense ratio" is total expense less "Farm interest expense" and "Depreciation and capital adjustment," divided by "Gross farm revenue."

"Depreciation expense ratio" is "Depreciation and capital adjustments" divided by "Gross farm revenue."

"Interest expense ratio" is "Farm interest expense" divided by "Gross farm revenue"

"Net farm income ratio" is "Net farm income" divided by "Gross farm revenue."

Table 10. Crop Production and Marketing Summary

This table contains three sections. The first section reports average acreage by land use. 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."

Table 11. Household and Personal Expenses

For those farms that keep records, the household and personal expenses are summarized in Table 11. The farms are grouped in the same ranking as in Table 1. Not all farms keep these records, therefore, the numbers may be different for each group. Averages are determined by the number of farms keeping these records. Table 8 presents calculated family living and includes all farms. Income tax paid is also shown on Table 8 and includes all farms.

Table 12. Operator Information, Nonfarm Summary

Table 12 reports the average for the number of operators per farm, the operator's age, and the number of years farming. This table also reports the income from nonfarm income, but the figure reported is the average over all farms <u>not</u> just those reporting nonfarm income.

Financial Guideline Measures

The Farm Financial Standards Task Force recommended the use of sixteen financial measures to evaluate a farms 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.

<u>Solvency</u>

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 the farm has

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. As your debt to asset ratio increases, these relationships become more pronounced. So profitability becomes a key concern when substantial debt capital is used in the business.

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.

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.

Repayment Capacity

Repayment capacity measures the ability to repay term debt (longer than one year) and to replace capital assets.

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.

Capital Replacement Margin: The capital replacement margin is the amount of money remaining from farm and non-farm income after all operating expenses, taxes, family living and debt payments have been paid. It is the amount available for acquiring capital assets, such as machinery and land, or servicing additional debt.

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.

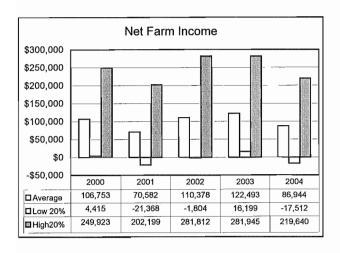
Asset Turnover: Asset turnover is a measure of how efficiently assets are used in the business. A farm with good operating profit margin and asset turnover will show a strong rate of return on farm assets. If operating profit margin is low, the asset turnover rate must be strong, or vice versa, to maintain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

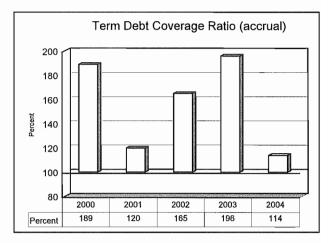
Operating Expense Ratio: This ratio indicates the percent of the gross farm income which is used to pay the operating expenses. Operating expenses do not include interest or depreciation expense.

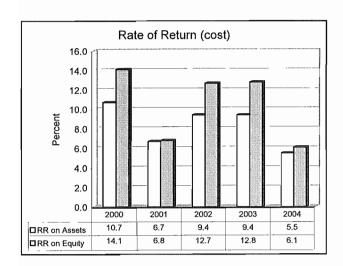
Depreciation Expense Ratio: This ratio indicates the percent of the gross farm income which is used to cover the depreciation expense.

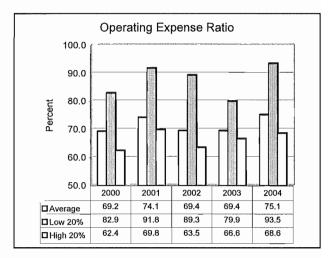
Interest Expense Ratio: This ratio indicates the percent of the gross farm income which is used to pay farm interest expenses. Net Farm Income Ratio: The ratio indicates the percent of the gross farm income which remains after all expenses.

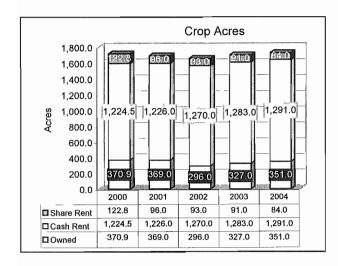
Five Year Trends Red River Valley Farm Business Management Education











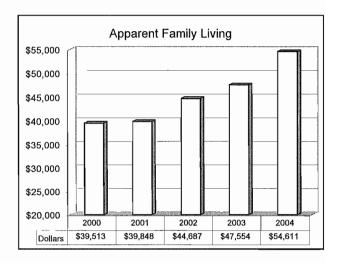


TABLE 1

FARM INCOME STATEMENT

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of farms	230	46	46	46
CASH FARM INCOME				
Barley	4,937	4,464	6,554	5,020
Beans, Black Turtle	273	562	54	667
Beans, Dark Red Kidney	415	417	_	-
Beans, Great Northern	508	-	-	2,541
Beans, Navy	2,978	8,350	631	3,579
Beans, Pinto	1,642	719	251	4,536
Corn	37,002	29,971	13,184	74,038
Hay, Alfalfa	1,236	985	647	3,982
Potatoes	1,609	3,411	-	-
Soybeans	100,206	68,718	81,588	141,208
Straw	735	48	-	115
Sugar Beets	168,923	118,567	168,634	318,994
Sunflowers	3,989	2,884	624	9,468
Sunflowers, Confectionary	3,830	2,345	11,014	2,448
Wheat, Durum	439	2,195	_	_
Wheat, Spring	120,696	91,933	130,118	177,537
Soybeans, Food	323	_	1,043	-
Miscellaneous crop income	76	121	-	3
Beef, Background Beef	229	62	_	1,082
Beef, Finish Beef Calves	1,834	-	-	8,762
Dairy Steers	1,012	-	5,058	-
Hogs, Farrow-Fin, Raised Hogs	2,003	-	_	10,016
Beef, Finish Cull Cows	57	_	_	283
CCC market loan gain	13	-	11	_
Misc. livestock income	163	-	223	27
LDP payments	5,312	3,484	4,854	7,633
Direct & CC govt payments	27,580	22,458	27,724	40,060
CRP payments	1,085	1,855	1,051	633
Livestock govt payments	166	-		828
Other government payments	2,468	1,057	1,354	7,863
Custom work income	7,582	6,407	5,165	8,692
Patronage dividends, cash	5,188	2,776	3,168	10,964
Insurance income	32,939	35,274	35,985	26,226
Cash from hedging accts	3,019	757	3,755	5,007
Other farm income	19,453	7,771	14,692	38,735
Gross Cash Farm Income	559,921	417,592	517,379	910,946

TABLE 1

FARM INCOME STATEMENT (Continued)

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of farms	230	46	46	46
CASH FARM EXPENSE				
Seed	42,012	31,403	39,316	60,389
Fertilizer	42,726	36,851	36,063	71,030
Crop chemicals	53,562	49,116	59,166	77,819
Crop insurance	19,790	17,665	18,841	27,043
Drying fuel	1,923	1,311	2,108	3,874
CCC buyback	5,875	1,337	1,351	12,755
Crop custom hire	250	-	-	
Crop hauling and trucking	427	703	71	801
Crop marketing	1,364	2,973	2,399	413
Crop miscellaneous	3,824	2,211	4,195	4,529
Feeder livestock purchase	1,390	_	2,256	4,098
Purchased feed	1,183	7	549	5,147
Livestock miscellaneous	425	59	151	1,719
Interest	23,542	21,172	22,891	26,866
Fuel & oil	23,608	19,751	19,956	35,821
Repairs	38,965	35,090	34,843	56,223
Custom hire	10,719	10,772	9,965	17,498
Hired labor	24,035	20,608	18,862	47,170
Land rent	81,496	68,037	80,406	118,452
Stock/quota lease	11,127	7,332	13,132	17,011
Machinery & bldg leases	6,428	4,521	8,434	9,517
Real estate taxes	4,133	2,919	3,069	6,859
Farm insurance	8,740	8,499	7,676	11,997
Utilities	5,002	5,156	4,355	6,766
Dues & professional fees	4,342	3,689	5,299	5,609
Hedging account deposits	1,429	95	1,182	3,311
Miscellaneous	9,489	6,744	7,749	15,755
Total cash expense	427,807	358,022	404,286	648,469
Net cash farm income	132,114	59,570	113,093	262,477
INVENTORY CHANGES				
Crops and feed	-38,563	-55,903	-38,777	-27,234
Market livestock	-407	-32	-1,785	-450
Accounts receivable	25,233	8,734	25,395	23,114
Prepaid expenses and supplies		-6,636		3,736
Accounts payable		-5,752		-5,389
Total inventory change	-21,583		-19,302	
Net operating profit	110,531		93,791	
DEPRECIATION AND OTHER CAPITAL ADJU	ISTMENTS			
Breeding livestock	-82	-17	-45	-123
Machinery and equipment	-29,460		-26,729	
Buildings and improvements	627	3,009	-962	2,565
Other farm capital	5,328			•
Total depr. and other capital adj				
real dept. and sener capital day	23,307	1,,10	21,15,	30,010
Net farm income	86,944	-17,512	72,654	219,640

TABLE 2 INVENTORY CHANGES

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	230	46	46	46
Net cash farm income	132,114	59,570	113,093	262,477
CROPS AND FEED				
Ending inventory	215,296	140,985	198,957	389,151
Beginning inventory	253,858	196,888	237,734	416,384
Inventory change	-38,563	-55,903	-38,777	-27,234
MARKET LIVESTOCK				
Ending inventory	2,610	102	2,317	9,357
Beginning inventory	3,017	134	4,102	9,806
Inventory change	-407	-32	-1,785	-450
ACCTS RECEIVABLE & OTHER CURRENT	ASSETS			
Ending inventory	65,418	33,893	52,844	121,194
Beginning inventory	40,186	25,159	27,449	98,080
Inventory change	25,233	8,734	25,395	23,114
PREPAID EXPENSES AND SUPPLIES				
Ending inventory	37,893	20,257	31,498	76,808
Beginning inventory	40,990	26,893	36,592	73,072
Inventory change	-3,097	-6,636	-5,094	3,736
ACCOUNTS PAYABLE & ACCRUED EXPENS	SES			
Beginning inventory	25,984	22,719	26,929	40,007
Ending inventory	30,733	28,471	25,970	45,395
Inventory change	-4,750	-5,752	959	-5,389
Total inventory change	-21,583	-59,589	-19,302	-6,221
Net operating profit	110,531	-19	93,791	256,255

TABLE 3 DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	230	46	46	46
Net operating profit	110,531	-19	93,791	256,255
BREEDING LIVESTOCK				
Ending inventory	643	270	63	2,229
Capital sales	2	_	_	-
Beginning inventory	701	287	107	2,313
Capital purchases	25	-	1	39
Depreciation, capital adjust.	-82	-17	-45	-123
MACHINERY AND EQUIPMENT				
Ending inventory	315,648	233,061	269,280	513,109
Capital sales	4,666	2,281	4,677	6,258
Beginning inventory	287,859	224,217	240,530	462,754
Capital purchases	61,915	34,966	60,156	104,462
Depreciation, capital adjust.	-29,460	-23,841	-26,729	-47,849
BUILDINGS AND IMPROVEMENTS				
Ending inventory	59,316	53,680	38,851	113,217
Capital sales	2,192	3,913	-	5,943
Beginning inventory	51,166	47,690	33,448	101,853
Capital purchases	9,716	6,894	6,365	14,742
Depreciation, capital adjust.	627	3,009	-962	2,565
OTHER CAPITAL ASSETS				
Ending inventory	199,391	158,185	192,899	316,403
Capital sales	1,921	0	100	3,652
Beginning inventory	183,300	154,286	168,372	301,169
Capital purchases	12,684	543	18,028	10,096
Depreciation, capital adjust.	5,328	3,356	6,598	8,791
Total depreciation, capital adj.	-23,587	-17,493	-21,137	-36,616
Net farm income	86,944	-17,512	72,654	219,640

TABLE 4

PROFITABILITY MEASURES

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	230	46	46	46
PROFITABILITY (assets valued at co	ct)			
Net farm income	86,944	-17,512	72,654	219,640
Labor and management earnings	46,428	-42,994	39,615	141,266
Rate of return on assets	5.5 %	-3.0 %	5.2 %	9.0 %
Rate of return on equity	6.1 %	-12.1 %	5.4 %	11.4 %
Operating profit margin	12.2 %	-7.4 %	10.8 %	19.8 %
Asset turnover rate	45.5 %	40.5 %	48.8 %	45.5 %
Abbee edinover race	13.5	40.5	40.0 %	45.5 %
Interest on farm net worth	40,516	25,483	33,039	78,373
Farm interest expense	25,450	24,082	24,011	28,534
Value of operator lbr and mgmt.	46,081	33,993	42,976	70,542
Return on farm assets	66,313	-27,423	53,689	177,632
Average farm assets	1,195,760	914,096	1,024,058	1,973,530
Return on farm equity	40,863	-51,505	29,678	149,098
Average farm equity	673,880	424,699	550,648	1,306,223
Value of farm production	543,530	370,367	499,362	897,009
	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	230	46	46	46
PROFITABILITY (assets valued at mag	rket)			
Net farm income	113,267	12,242	96,055	249,366
Labor and management earnings	67,932	-15,260	61,199	166,122
Rate of return on assets	6.6 %	0.2 %	6.6 %	9.2 %
Rate of return on equity	8.9 %	-4.7 %	9.1 %	12.9 %
Operating profit margin	17.0 %	0.6 %	15.4 %	23.1 %
Asset turnover rate	38.8 %	36.0 %	43.0 %	39.7 %
Interest on farm net worth	45,335	27,502	34,856	83,244
Farm interest expense	25,450	24,082	24,011	28,534
Value of operator lbr and mgmt.	46,081	33,993	42,976	70,542
Return on farm assets	92,636	2,331	77,091	207,357
Average farm assets	1,399,769	1,030,183	1,160,018	2,259,924
Return on farm equity	67,186	-21,751	53,080	178,824
Average farm equity	754,999	458,360	580,934	1,387,398
Value of farm production	543,530	370,367	499,362	897,009

TABLE 5 LIQUIDITY MEASURES

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
	AII FAIMS	LOW 20%	40 - 60%	High 20%
Number of farms	230	46	46	46
LIQUIDITY (cash)				
Net cash farm income	132,114	59,570	113,093	262,477
Net nonfarm income	15,123	21,327	12,833	9,328
Family living and taxes	68,863	53,501	59,402	98,202
Principal due on long term debt	11,177	10,495	9,116	15,503
Cash available for interm. debt	67,197	16,902	57,408	158,099
Average intermediate debt	167,393	151,817	156,514	218,110
Years to turnover interm. debt	2.5	9.0	2.7	1.4
Expense as a % of income	76 %	86 %	78 %	71 %
Interest as a % of income	4 %	5 %	4 %	3 %
LIQUIDITY (accrual)				
Total accrual farm income	546,185	370,392	502,212	906,376
Total accrual operating expense	435,654	370,410	408,421	650,121
Net accrual operating income	110,531	-19	93,791	256,255
Net nonfarm income	15,123	21,327	12,833	9,328
Family living and taxes	68,863	53,501	59,402	98,202
Principal due on long term debt	11,177	10,495	9,116	15,503
Available for intermediate debt	45,614	-42,687	38,106	151,878
Average intermediate debt	167,393	151,817	156,514	218,110
Years to turnover interm. debt	3.7	**	4.1	1.4
Expense as a % of income	80 왕	100 %	81 %	72 %
Interest as a % of income	5 %	7 %	5 %	3 %

^{**} Income insufficient to meet debt servicing requirements

TABLE 6

BALANCE SHEET AT COST VALUES

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of farms	199	41	39	39
ASSETS				
Current Farm Assets				
Cash and checking balance	15,978	14,225	16,938	24,878
Prepaid expenses & supplies	34,698	18,084	31,213	76,518
Growing crops	105	466	· -	
Accounts receivable	54,990	28,201	39,402	122,589
Hedging accounts	1,372	294	1,904	3,044
Crops held for sale or feed	178,795	95,886	175,071	340,554
Crops under government loan	13,100	17,356	7,839	9,407
Market livestock held for sale	3,017	115	2,733	11,036
Other current assets	585	449	1,739	700
Total current farm assets	302,640	175,074	276,839	588,726
Intermediate Farm Assets				
Breeding livestock	743	302	74	2,629
Machinery and equipment	269,770	190,320	246,142	442,067
Other intermediate assets	140,253	112,187	149,008	206,335
Total intermediate farm assets	410,767	302,809	395,224	651,032
Long Term Farm Assets				
Farm land	317,981	261,873	250,865	473,386
Buildings and improvements	53,153	46,511	31,611	93,237
Other long-term assets	25,259	8,684	11,737	67,451
Total long-term farm assets	396,392	317,068	294,213	634,075
Total Farm Assets	1,109,799	794,951	966,276	1,873,832
Total Nonfarm Assets	193,479	187,366	155,004	313,194
Total Assets	1,303,278	982,316	1,121,280	2,187,026
LIABILITIES				
Current Farm Liabilities				
Accrued interest	9,715	9,966	8,307	13,737
Accounts payable	16,817	12,899	14,511	28,199
Current notes	134,857	114,834	146,068	177,389
Government crop loans	11,590	15,033	7,307	8,426
Principal due on term debt	40,730	28,979	41,271	60,647
Total current farm liabilities	213,708	181,711	217,465	288,398
Total intermediate farm liabs	119,387	90,317	117,134	170,061
Total long term farm liabilities	185,685	167,379	159,979	223,063
Total farm liabilities	518,780	439,407	494,578	681,521
Total nonfarm liabilities	50,759	37,563	61,924	64,175
Total liabilities	569,539	476,970	556,502	745,697
	777 770	505 744	F.// 770	4 //4 770
Net worth (farm and nonfarm)	733,739	505,346	564,779	
Net worth change	40,762	-29,511	33,719	130,703
RATIO ANALYSIS				
Current farm liabilities / assets	71 %	104 %	79 %	49 %
Curr. & interm farm liab. / assets	47 %	57 %	50 %	37 %
Long term farm liab. / assets	47 %	53 %	54 %	35 %
Total debt to asset ratio	44 %	49 %	50 %	34 %

TABLE 7 BALANCE SHEET AT MARKET VALUES Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

	•			
	Avg. Of			
		1 20%	/0 /0%	112 1 2007
	All Farms	Low 20%	40 - 60%	High 20%
Number of farms	199	41	39	39
ASSETS				
Current Farm Assets				
Cash and checking balance	15,978	14,225	16,938	24,878
Prepaid expenses & supplies	34,698	18,084	31,213	76,518
Growing crops	105	466		
Accounts receivable	54,990	28,201	39,402	122,589
Hedging accounts	1,372	294	1,904	3,044
Crops held for sale or feed	178,795	95,886	175,071	340,554
Crops under government loan	13,100	17,356	7,839	9,407
Market livestock held for sale	3,017	115	2,733	11,036
Other current assets	585	449	1,739	700
Total current farm assets	302,640	175,074	276,839	588,726
Intermediate Farm Assets				
Breeding livestock	805	320	86	2,785
Machinery and equipment	335,438	225,275	319,048	538,298
Other intermediate assets	175,807	124,730	167,893	279,057
Total intermediate farm assets	512,050	350,324	487,027	820,140
	312,030	330,324	401,021	020,140
Long Term Farm Assets	707 744			
Farm land	385,316	318,094	287,863	552,940
Buildings and improvements	62,930	57,645	45,270	108,191
Other long-term assets	27,442	8,535	11,769	78,909
Total long-term farm assets	475,688	384,274	344,902	740,040
Total Farm Assets	1,290,378	909,672	1,108,768	•
Total Taliii Assets	1,270,310	707,012	1,100,700	2,148,906
Total Nonfarm Assets	216,778	208,757	186,690	352,143
Total Assets	1,507,156	1,118,430	1,295,457	2,501,049
LIABILITIES				
Current Farm Liabilities				
Accrued interest	9,715	9,966	8,307	17 777
				13,737
Accounts payable	16,817	12,899	14,511	28,199
Current notes	134,857	114,834	146,068	177,389
Government crop loans	11,590	15,033	7,307	8,426
Principal due on term debt	40,730	28,979	41,271	60,647
Total current farm liabilities	213,708	181,711	217,465	288,398
Total intermediate farm liabs	119,387	90,317	117,134	170,061
Total long term farm liabilities	185,685	167,379	159,979	•
			•	223,063
Total farm liabilities	518,780	439,407	494 , 578	681,521
Total nonfarm liabilities	50 , 759	37,563	61,924	64 , 175
Total liabs excluding deferreds	569,539	476,970	556,502	745,697
Total deferred liabilities	104,089	64,708	100,474	193,804
Total liabilities	673,628	541,678	656,975	939,500
Total Clasification	013,020	341,070	0,00,713	737,500
Deteined comings	777 770	FOF 7//	F// 770	4 //4 770
Retained earnings	733,739	505,346	564,779	1,441,330
Market valuation equity	99,789	71,406	73,703	120,219
Net worth (farm and nonfarm)	833,527	576,752	638,482	1,561,549
Net worth excluding deferreds	937,616	641,460	738,956	1,755,352
Net worth change	69,293	364	54,338	169,784
nat not the online	0,12,0	301	21,330	107,104
DATIO ANALYCIC				
RATIO ANALYSIS	~4 0:	404.00		
Current farm liabilities / assets	71 %	104 %	79 %	49 %
Curr. & interm farm liab. / assets	41 %	52 %	44 %	33 %
Long term farm liab. / assets	39 %	44 %	46 %	30 %
Total debt to asset ratio	45 %	48 %	51 %	38 %
Debt to assets excl deferreds	38 %	43 %	43 %	30 %
DEET TO GOOGLO CACT GETTING	30 %	73 /0	43 /0	J U / ₀

TABLE 8 STATEMENT OF CASH FLOWS

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Farm Income)

	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of farms	230	46	46	46
Beginning cash (farm & nonfarm)	21,939	16,329	18,737	36,901
CASH FROM OPERATING ACTIVITIES				
Gross cash farm income	559,921	417,592	517,379	910,946
Net nonfarm income	15,123	21,327	12,833	9,328
Total cash farm expense	-427,807	-358,022	-404,286	-648,469
Apparent family living expense	-54,611	-42,325	-50,550	-72,976
Income and social security tax	-14,239	-11,175	-8,852	-25,227
Cash from operations	78,388	27,397	66,524	173,602
CASH FROM INVESTING ACTIVITIES				
Sale of breeding livestock	2	-	_	_
Sale of machinery & equipment	4,657	2,237	4,677	6,258
Sale of titled vehicles	9	43	_	-
Sale of farm land	1,713	326	85	_
Sale of farm buildings	2,192	3,913		5,943
Sale of other farm assets	1,921	0	100	3,652
Sale of nonfarm assets	3,388	473	7,921	1,700
Purchase of breeding livestock	-25	_	-1	-39
Purchase of machinery & equip.	-58,274	-32,405	-56,402	-98,961
Purchase of titled vehicles	-3,641	-2,561	-3,754	-5,501
Purchase of farm land	-37,769	-16,450	-48,820	-45,669
Purchase of farm buildings	-9,716	-6,894	-6,365	-14,742
Purchase of other farm assets	-12,684	-543	-18,028	-10,096
Purchase of nonfarm assets	-23,709	-12,588	-24,924	-38,051
Cash from investing activities	-131,936	-64,448	-145,510	-195,505
CASH FROM FINANCING ACTIVITIES				
Money borrowed	335,326	318,642	351,266	368,972
Cash gifts and inheritances	5,459	5,465	6,430	12,279
Principal payments	-283,570	-278,342	-280,897	-351,679
Dividends paid	-13	_	_	-
Gifts given	-350	_	-120	-1,563
Cash from financing activities	56,852	45,766	76,679	28,009
Net change in cash balance	3,304	8,715	-2,307	6,106
Ending cash (farm & nonfarm)	25,243	25,044	16,430	43,007

TABLE 9 FINANCIAL STANDARDS MEASURES Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

Number of farms 230 46 46 46 LIQUIDITY Current ratio 1.47 0.99 1.37 2.08 Working capital 112,245 -2,708 83,113 330,200 SOLVENCY (market) Farm debt to asset ratio 46 % 57 % 50 % 38 % Farm equity to asset ratio 54 % 43 % 50 % 62 % Farm debt to equity ratio 87 % 134 % 101 % 61 % PROFITABILITY (cost) Rate of return on farm assets 5.5 % -3.0 % 5.2 % 9.0 % Rate of return on farm equity 6.1 % -12.1 % 5.4 % 11.4 % Operating profit margin 12.2 % -7.4 % 10.8 % 19.8 % Net farm income 86,944 -17,512 72,654 219,640 REPAYMENT CAPACITY Term debt coverage ratio 114 % -28 % 107 % 215 %
Current ratio 1.47 0.99 1.37 2.08 Working capital 112,245 -2,708 83,113 330,200 SOLVENCY (market) Farm debt to asset ratio 46 % 57 % 50 % 38 % Farm equity to asset ratio 54 % 43 % 50 % 62 % Farm debt to equity ratio 87 % 134 % 101 % 61 % PROFITABILITY (cost) Rate of return on farm assets 5.5 % -3.0 % 5.2 % 9.0 % Rate of return on farm equity 6.1 % -12.1 % 5.4 % 11.4 % Operating profit margin 12.2 % -7.4 % 10.8 % 19.8 % Net farm income 86,944 -17,512 72,654 219,640
SOLVENCY (market) Farm debt to asset ratio
Farm debt to asset ratio
Farm equity to asset ratio 54 % 43 % 50 % 62 % Farm debt to equity ratio 87 % 134 % 101 % 61 % PROFITABILITY (cost) Rate of return on farm assets 5.5 % -3.0 % 5.2 % 9.0 % Rate of return on farm equity 6.1 % -12.1 % 5.4 % 11.4 % Operating profit margin 12.2 % -7.4 % 10.8 % 19.8 % Net farm income 86,944 -17,512 72,654 219,640 REPAYMENT CAPACITY
Farm debt to equity ratio 87 % 134 % 101 % 61 % PROFITABILITY (cost) Rate of return on farm assets 5.5 % -3.0 % 5.2 % 9.0 % Rate of return on farm equity 6.1 % -12.1 % 5.4 % 11.4 % Operating profit margin 12.2 % -7.4 % 10.8 % 19.8 % Net farm income 86,944 -17,512 72,654 219,640 REPAYMENT CAPACITY
PROFITABILITY (cost) Rate of return on farm assets 5.5 % -3.0 % 5.2 % 9.0 % Rate of return on farm equity 6.1 % -12.1 % 5.4 % 11.4 % Operating profit margin 12.2 % -7.4 % 10.8 % 19.8 % Net farm income 86,944 -17,512 72,654 219,640 REPAYMENT CAPACITY
Rate of return on farm assets 5.5 % -3.0 % 5.2 % 9.0 % Rate of return on farm equity 6.1 % -12.1 % 5.4 % 11.4 % Operating profit margin 12.2 % -7.4 % 10.8 % 19.8 % Net farm income 86,944 -17,512 72,654 219,640 REPAYMENT CAPACITY
Rate of return on farm equity 6.1 % -12.1 % 5.4 % 11.4 % Operating profit margin 12.2 % -7.4 % 10.8 % 19.8 % Net farm income 86,944 -17,512 72,654 219,640 REPAYMENT CAPACITY
Operating profit margin 12.2 % -7.4 % 10.8 % 19.8 % Net farm income 86,944 -17,512 72,654 219,640 REPAYMENT CAPACITY
Net farm income 86,944 -17,512 72,654 219,640 REPAYMENT CAPACITY
REPAYMENT CAPACITY
Term debt coverage ratio 114 % -28 % 107 % 215 %
Capital replacement margin 9,112 -70,391 4,063 99,805
EFFICIENCY
Asset turnover rate (cost) 45.5 % 40.5 % 48.8 % 45.5 %
Operating expense ratio 75.1 % 93.5 % 76.5 % 68.6 %
Depreciation expense ratio 4.3 % 4.7 % 4.2 % 4.0 %
Interest expense ratio 4.7 % 6.5 % 4.8 % 3.1 %
Net farm income ratio 15.9 % -4.7 % 14.5 % 24.2 %

TABLE 10 CROP PRODUCTION AND MARKETING SUMMARY Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of farms	230	46	46	46
Acreage Summary				
Total acres owned	377	320	314	493
Total crop acres	1,726	1,432	1,665	2,438
Crop acres owned	351	278	292	480
Crop acres cash rented	1,291	1,094	1,339	1,767
Crop acres share rented	84	60	33	192
Total pasture acres	2	_	-	10
Average Price Received (Cash SalesO	nly)			
Soybeans per bushel	6.69	6.33	6.38	6.82
Wheat, Spring per bushel	3.47	3.27	3.47	3.50
Corn per bushel	2.27	2.11	2.22	2.42
Barley per bushel	2.41	2.35	2.20	2.36
Sunflowers per cwt	12.55	-	-	13.25
Sugar Beets per ton	40.55	-	-	_
Beans, Navy per cwt	20.22	_	_	_
Sunflowers, Confectionary per cwt	16.75	-	16.55	-
Hay, Alfalfa per ton	73.26	-	_	_
Beans, Black Turtle per cwt	17.39	-	_	_
Beans, Pinto per cwt	24.34	-	-	-
Average Yield Per Acre				
Soybeans (bushel)	22.38	17.18	20.96	27.93
Wheat, Spring (bushel)	63.70	61.79	63.87	65.26
Sugar Beets (ton)	19.65	18.76	19.35	20.51
Corn (bushel)	114.50	104.43	126.54	127.73
Rented Out (\$)	93.15	_	-	77.49
CRP (\$)	57.75	-	-	55.02
Barley (bushel)	83.94	-	-	-
Sunflowers (cwt)	11.15	-	_	-
Beans, Navy (cwt)	7.80	-	-	-
Soybeans, Food (bushel)	15.78	-	-	-
Sunflowers, Confectionary (cwt)	8.77	-	6.60	-
Hay, Alfalfa (ton)	3.92	-	-	-
Beans, Black Turtle (cwt)	6.61	-	-	-

TABLE 11

HOUSEHOLD AND PERSONAL EXPENSES

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

	Avg. Of All Farms
Number of farms	16
Average family size	2.9
Family Living Expenses	
Food and meals expense	7,217
Medical care	4,313
Health insurance	2,031
Cash donations	1,991
Household supplies	3,718
Clothing	2,535
Personal care	4,847
Child / Dependent care	291
Alimony and Child support	12
Gifts	2,089
Education	1,644
Recreation	2,466
Utilities (household share)	1,765
Nonfarm vehicle operating expense	1,247
Household real estate taxes	172
Dwelling rent	79
Household repairs	1,411
Nonfarm interest	655
Disability / Long term care insura	n 58
Life insurance payments	1,852
Nonfarm property insurance	122
Miscellaneous	1,531
Total cash family living expense	42,044
Family living from the farm	_
Total family living	42,044
Other Nonfarm Expenditures	
Income taxes	15,637
Furnishing & appliance purchases	-
Nonfarm vehicle purchases	4,158
Nonfarm real estate purchases	5,135
Other nonfarm capital purchases	383
Nonfarm savings & investments	1,524
Total other nonfarm expenditures	26,836
Total cash family living	
investment & nonfarm capital purch	68,880

TABLE 12 NONFARM INCOME, OPERATOR AND LABOR INFORMATION Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of farms	230	46	46	46
NONFARM INCOME				
Nonfarm wages & salary	11,715	15,242	11,974	6,286
Net nonfarm business income	960	1,141	91	859
Nonfarm rental income	763	2,678	100	76
Nonfarm interest income	133	52	34	348
Nonfarm cash dividends	483	1,737	-	603
Tax refunds	158	168	261	18
Other nonfarm income	912	310	374	1,139
Total nonfarm income	15,123	21,327	12,833	9,328
OPERATOR INFORMATION				
Average number of operators	1.1	1.0	1.1	1.2
Average age of operators	44.1	45.4	41.0	46.2
Average number of years farming	21.0	22.3	18.1	24.2
RESULTS PER OPERATOR				
Working capital	100,688	-2,685	78,024	266,477
Total assets (market)	1,482,113	1,227,081	1,298,476	2,143,668
Total liabilities	652,780	633,406	633,843	767,249
Net worth (market)	829,332	593,675	664,633	1,376,420
Net worth excl deferred liabs	942,782	675,304	768,943	1,548,304
Gross farm income	489,947	367,199	471,464	731,462
Total farm expense	411,955	384,559	403,259	554,208
Net farm income	77,992	-17,361	68,206	177,253
Net nonfarm income	13,566	21,144	12,048	7,528
Family living & tax withdrawals	61,772	53,039	55,765	79,251
Total acres owned	338.2	316.8	294.8	397.8
Total crop acres	1,548.3		1,563.2	1,967.7
Crop acres owned	315.2	275.2	274.5	387.6
Crop acres cash rented	1,157.6	1,084.4	1,257.3	1,425.6
Crop acres share rented	75.5	59.7	31.4	
Total pasture acres	1.9	-	-	8.4
LABOR ANALYSIS				
Number of farms	230	46	46	46
Total unpaid labor hours	1,918	1,673	1,925	2,239
Total hired labor hours	1,344	1,203	1,083	2,117
Total labor hours per farm	3,262	2,875	3,008	4,356
Unpaid hours per operator	1,721	1,658	1,807	1,807
Value of farm production / hour	166.60	128.81	166.02	205.90
Net farm income / unpaid hour	45.33	-10.47	37.74	98.09
•				

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 are classified into low 20% or 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 60% for a third. When there are less than 25 total farms with any particular crop and farmer's tenure, only overall averages are presented.

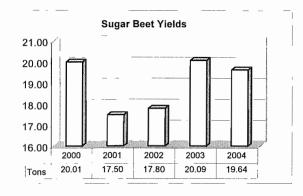
Value per unit is the market price received plus any loan deficiency payment. Miscellaneous income includes crop insurance and disaster payments for the crop.

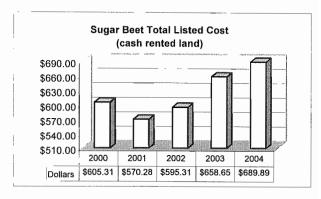
Several cost items, such as "utilities," "hired labor," and "interest paid," are listed under both "direct" and "overhead" costs because some of these costs are specific to that crop whereas others are general overhead costs of the farm. For example, "Direct Lease Payments" refers to non-land inputs or resources leased and used only in that crop enterprise and not listed elsewhere under direct costs; 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 separate category and is assigned as a direct cost for each crop enterprise because it is identifiable with the specific crop. In the case of double cropping, one-half of the rent is charged to each crop.

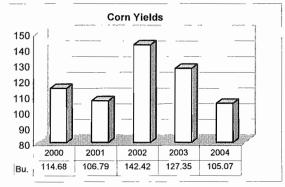
In the last section of the crop table, "Total direct expense per unit" and "Total dir & ovhd exp per unit" are calculated by dividing "Total direct expense per acre" and "Total dir & ovhd expenses per acre," respectively, by "Yield per acre." "With labor & management" is the breakeven yield after direct, 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.

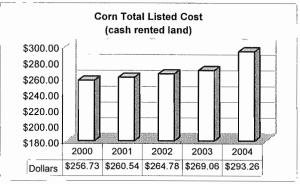
Rounding of individual items for the report may have caused minor discrepancies with the calculated totals.

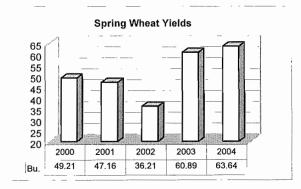
Five Year Crop History of Yields and Cost of Production Red River Valley Farm Business Management Education

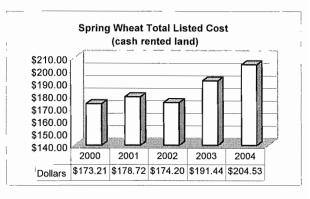


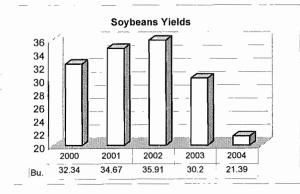












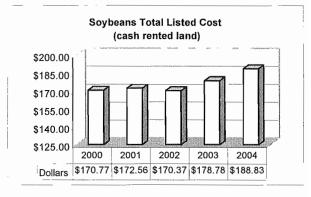


TABLE 13 - 1 Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Barley on Owned Land

Barrey on Owned Band		
	Avg. Of	
	All Farms	
Number of fields	6	
Number of farms	6	
The same of	98.33	
Acres	89.65	
Yield per acre (bu.) Operators share of yield %	100.00	
Value per bu.	2.69	
Total product return per acre	241.03	
Miscellaneous income per acre	0.52	
Gross return per acre	241.55	
D'accele Dance		
Direct Expenses	0 61	
Seed Fertilizer	9.61 31.52	
Crop chemicals	22.92	
Crop insurance	6.60	
Drying fuel	0.74	
Fuel & oil	7.83	
Repairs	14.38	
Custom hire	4.55	
Hired labor	1.11	
Operating interest	2.98	
Miscellaneous	0.55	
Total direct expenses per acre	102.79	
Return over direct exp per acre	138.76	
Overhead Expenses		
Custom hire	2.68	
Hired labor	2.00	
Machinery & bldg leases	1.41	
RE & pers. property taxes	9.19	
Farm insurance	2.95	
Utilities	2.18	
Dues & professional fees	1.52	
Interest	28.67	
Mach & bldg depreciation	10.28	
Miscellaneous	1.71	
Total overhead expenses per acre	62.58	
Total dir & ovhd expenses per acre	165.37 76.18	
Net return per acre	76.18	
Lbr & mgt charge per acre	15.11	
Net return over 1br & mgt	61.07	
Government payments	15.18	
Net return with govt payments	76.25	
Cost of Production		
Total direct expense per bu.	1.15	
Total dir & ovhd exp per bu.	1.84	
With labor & management	2.01	
Total exp less govt & oth income	1.84	
Egt labor hours now agra	1 02	
Est. labor hours per acre	1.03	
26		

TABLE 13 - 2

Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Barley on Cash Rent

	Avg. Of All Farms
Number of fields Number of farms	12 12
Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Miscellaneous income per acre Gross return per acre Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Hired labor Land rent Operating interest Miscellaneous	227.82 82.93 100.00 2.71 224.79 3.28 228.06 8.13 26.65 22.39 10.11 8.53 15.09 1.09 1.24 58.17 2.70
Total direct expenses per acre Return over direct exp per acre	0.32 154.41 73.65
Overhead Expenses Custom hire Hired labor Machinery & bldg leases Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre Lbr & mgt charge per acre	2.13 4.23 0.86 4.74 2.13 1.45 3.23 13.68 1.78 34.23 188.64 39.42
Net return over lbr & mgt Government payments Net return with govt payments	24.89 14.71 39.60
Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. With labor & management Total exp less govt & oth income	1.86 2.27 2.45 2.23
Est. labor hours per acre	1.23

TABLE 13 - 3

Crop Enterprise Analysis

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Beans, Black Turtle on Cash Rent

	Avg. Of All Farms
Number of fields Number of farms	8 6
Acres Yield per acre (cwt.) Operators share of yield % Value per cwt. Total product return per acre Miscellaneous income per acre Gross return per acre	49.51 5.90 100.00 17.38 102.52 81.81 184.33
Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Land rent Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	31.49 12.73 31.72 14.25 13.28 17.52 10.31 54.79 3.78 1.29 191.17 -6.84
Overhead Expenses Custom hire Hired labor Machinery & bldg leases Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre	1.51 5.60 1.28 2.93 1.50 2.78 3.66 13.90 2.76 35.92 227.09 -42.76
Lbr & mgt charge per acre Net return over lbr & mgt Government payments Net return with govt payments	19.70 -62.46 - -62.46
Cost of Production Total direct expense per cwt. Total dir & ovhd exp per cwt. With labor & management Total exp less govt & oth income	32.42 38.51 41.85 27.97
Est. labor hours per acre	1.83

TABLE 13 - 4

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2004
(Farms Sorted By Net Return)

Beans, Navy on Cash Rent

	Avg. Of All Farms	
Number of fields	8	
Number of farms	8	
Acres	235.09	
Yield per acre (cwt.)	5.52	
Operators share of yield %	100.00	
Value per cwt.	18.59	
Total product return per acre	102.63	
Miscellaneous income per acre	69.61	
Gross return per acre	172.23	
Direct Expenses		
Seed	30.35	
Fertilizer	23.63	
Crop chemicals	34.55	
Crop insurance	12.32	
Fuel & oil	12.76	
Repairs	27.79	
Custom hire	3.14	
Hired labor	0.65	
Land rent	57.31	
Operating interest	5.89	
Miscellaneous	0.58	
Total direct expenses per acre	208.99	
Return over direct exp per acre	-36.76	
Overhead Expenses		
Custom hire	3.59	
Hired labor	12.90	
Machinery & bldg leases	1.69	
Farm insurance	7.82	
Utilities	3.35	
Dues & professional fees	1.97	
Interest	5.37	
	21.09	
Mach & bldg depreciation Miscellaneous	4.25	
	62.03	
Total overhead expenses per acre		
Total dir & ovhd expenses per acre		
Net return per acre	-98.78	
Lbr & mgt charge per acre	23.87	
Net return over lbr & mgt	-122.65	
Government payments Net return with govt payments	-122.65	
,	122.03	
Cost of Production Total direct expense per cwt.	37.85	
	49.09	
	53.41	
Total dir & ovhd exp per cwt.		
	40.80	
Total dir & ovhd exp per cwt. With labor & management		

TABLE 13 - 5 Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (FarmsSorted By Net Return)

Corn on Owned Land

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
	AII raims	LOW 20%	40 - 60%	High 20%
Number of fields Number of farms	48 44	8	11 9	10 9
Acres	135.14	169.81	172.84	109.28
Yield per acre (bu.)	112.34	86.22	112.68	138.48
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	2.13	1.94	2.15	2.30
Total product return per acre	238.80	167.20	242.50	319.17
Miscellaneous income per acre	39.31	30.72	46.25	27.96
Gross return per acre	278.11	197.93	288.75	347.13
Direct Expenses				
Seed	39.13	41.45	37.61	42.25
Fertilizer	49.21	50.88	50.12	51.14
Crop chemicals	22.04	17.48	25.77	22.86
Crop insurance	12.48	14.37	12.12	12.30
Drying fuel	14.56	13.42	13.28	15.15
Fuel & oil	14.27	14.70	14.45	12.50
Repairs Custom hire	22.89 2.82	23.20 3.83	22.97 3.52	20.30
Hired labor	1.09	5.65	3.73	1.20
Operating interest	4.21	5.87	3.49	1.01
Miscellaneous	0.31	0.39	0.23	0.25
Total direct expenses per acre	182.99	185.58	187.28	178.96
Return over direct exp per acre	95.12	12.35	101.47	168.17
Overhead Expenses				
Custom hire	1.66	0.84	1.88	2.98
Hired labor	10.36	14.61	13.07	7.00
Machinery & bldg leases	2.96	0.52	6.25	1.45
RE & pers. property taxes	9.75	10.72	9.14	10.72
Farm insurance	4.49	5.24	4.66	3.33
Utilities	2.87	3.27	2.64	1.25
Dues & professional fees	2.26	2.16	1.65	1.67
Interest	31.59	35.43	33.42	20.14
Mach & bldg depreciation Miscellaneous	19.10 3.31	18.09	17.62	21.83
Total overhead expenses per acre	88.34	3.70 94.58	3.70 94.01	2.11 72.49
Total dir & ovhd expenses per acre		280.16	281.29	251.44
Net return per acre	6.78	-82.24	7.46	95.69
The compt above non-	24 50	01 01	00.00	
Lbr & mgt charge per acre Net return over lbr & mgt	24.79 -18.00	21.81 -104.05	23.26 -15.80	31.43
Government payments	14.11	13.66	15.25	64.26 12.09
Net return with govt payments	-3.90	-90.39	-0.55	76.35
and S para 11				
Cost of Production	1 (2	0 15	3 66	1 00
Total direct expense per bu. Total dir & ovhd exp per bu.	1.63 2.42	2.15 3.25	1.66 2.50	1.29
With labor & management	2.42	3.25	2.50	1.82 2.04
Total exp less govt & oth income	2.16	2.99	2.16	1.75
Bat Jahan hausa sara sara	4 80	2 22		
Est. labor hours per acre	1.73	2.08	1.82	1.39
	² 30			

TABLE 13 - 6 Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (FarmsSorted By Net Return)

Corn on Cash Rent

	orn on cash	ICIIC		
	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of fields	90	17	15	. 15
Number of farms	75	15	15	15
Acres	248.91	220.72	269.73	427.41
Yield per acre (bu.)	105.07	75.05	103.08	126.38
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu. Total product return per acre	2.13 224.18	1.74 130.92	2.08 214.29	2.36 298.05
Miscellaneous income per acre	57.46	80.17	53.33	55.50
Gross return per acre	281.63	211.09	267.62	353.54
Direct Expenses				
Seed	40.65	43.10	41.92	40.46
Fertilizer	47.75	53.94	46.53	48.59
Crop chemicals	20.33	21.54	21.03	19.51
Crop insurance	13.97	15.02	15.76	13.78
Drying fuel	14.91	25.07	17.93	10.38
Fuel & oil	13.01	15.53	10.77	12.88
Repairs	21.21	21.10	18.77	21.93
Custom hire Land rent	2.64 62.97	5.64 60.81	3.56	1.52
Machinery & bldg leases	0.77	- 60.81	62.79 -	64.00 0.13
Operating interest	4.60	6.88	3.53	2.96
Miscellaneous	1.01	0.04	0.48	0.15
Total direct expenses per acre	243.82	268.68	243.07	236.28
Return over direct exp per acre	37.81	-57.59	24.55	117.26
Overhead Expenses				
Custom hire	2.58	1.78	2.45	3.30
Hired labor	9.99	12.33	11.20	10.02
Machinery & bldg leases	3.61	1.79	5.06	2.41
Farm insurance Utilities	4.46	4.28	4.68	3.82
Dues & professional fees	2.43 2.04	2.65 2.30	2.12 1.58	2.23
Interest	4.74	6.31	1.99	4.53
Mach & bldg depreciation	17.14	16.16	13.84	21.24
Miscellaneous	2.44	2.63	2.62	2.02
Total overhead expenses per acre	49.44	50.23	45.55	51.94
Total dir & ovhd expenses per acre		318.91	288.62	288.22
Net return per acre	-11.63	-107.82	-21.00	65.32
Lbr & mgt charge per acre	24.91	25.53	20.49	29.52
Net return over 1br & mgt	-36.55	-133.35	-41.49	35.80
Government payments	13.73 -22.82	13.87	12.42	13.88
Net return with govt payments	-22.82	-119.48	-29.07	49.68
Cost of Production	2.22	2 50	2.26	1 05
Total direct expense per bu. Total dir & ovhd exp per bu.	2.32 2.79	3.58 4.25	2.36 2.80	1.87
With labor & management	3.03	4.25	3.00	2.28 2.51
Total exp less govt & oth income	2.35	3.34	2.36	1.97
-				
Est. labor hours per acre	1.63	1.94	1.34	1.51
	2.1			

TABLE 13 - 7
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2004
(Farms Sorted By Net Return)

Corn on Share Rent

	Avg. Of All Farms
Number of fields Number of farms	16 12
Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Miscellaneous income per acre Gross return per acre	138.02 127.93 69.18 2.17 191.71 11.35 203.05
Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Drying fuel Fuel & oil Repairs Custom hire Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	37.59 47.44 16.88 13.68 14.26 11.40 18.59 4.73 2.45 0.40 167.42 35.64
Overhead Expenses Custom hire Hired labor Machinery & bldg leases Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre	0.30 10.93 4.27 3.90 2.69 1.92 1.72 19.02 2.14 46.88 214.30 -11.24
Lbr & mgt charge per acre Net return over lbr & mgt Government payments Net return with govt payments	23.18 -34.43 10.95 -23.48
Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. With labor & management Total exp less govt & oth income	1.89 2.42 2.68 2.43
Est. labor hours per acre	1.80

Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2004
(Farms Sorted By Net Return)

Hay, Alfalfa on Cash Rent

	Avg. Of All Farms
Number of fields Number of farms	5 5
Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Miscellaneous income per acre Gross return per acre	177.44 4.01 100.00 68.04 272.55 - 272.55
Direct Expenses Seed Fertilizer Fuel & oil Repairs Land rent Machinery & bldg leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	0.97 9.09 17.09 20.43 68.20 0.52 8.97 8.41 133.69 138.86
Overhead Expenses Custom hire Hired labor Machinery & bldg leases Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre	1.35 7.80 1.00 2.58 4.07 1.90 3.76 19.28 3.91 45.65 179.34 93.21
Lbr & mgt charge per acre Net return over lbr & mgt Government payments Net return with govt payments	34.83 58.38 17.10 75.48
Cost of Production Total direct expense per ton Total dir & ovhd exp per ton With labor & management Total exp less govt & oth income	33.37 44.77 53.47 49.20
Est. labor hours per acre	2.50

Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Soybeans on Owned Land

	Avg. Of		40 600	T. 1 000
	All Farms	Low 20%	40 - 60%	High 20%
Number of fields	149	23	29	43
Number of farms	110	22	22	22
Acres	169.91	177.19	180.17	126.49
Yield per acre (bu.)	20.83	19.01	20.33	20.26
Operators share of yield %	100.00	100.00 5.78	100.00	100.00
Value per bu.	5.86 122.08	109.85	5.63 114.47	6.39 129.40
Total product return per acre Miscellaneous income per acre	61.91	41.37	61.96	84.10
Gross return per acre	183.99	151.22	176.44	213.50
Direct Expenses				
Seed	30.11	30.80	27.88	28.79
Fertilizer	5.70	7.56	5.69	3.81
Crop chemicals	15.87	17.31	18.56	12.86
Crop insurance	11.85	11.94	11.00	12.61
Fuel & oil	9.12 14.34	8.64 16.24	9.71	8.36
Repairs Custom hire	2.26	2.33	14.66 2.36	11.48 1.77
Hired labor	0.32	1.62	0.05	0.24
Operating interest	2.63	3.85	3.30	1.29
Miscellaneous	0.36	0.23	0.75	0.13
Total direct expenses per acre	92.56	100.50	93.97	81.34
Return over direct exp per acre	91.43	50.72	82.47	132.16
Overhead Expenses				
Custom hire	2.17	4.58	1.84	1.51
Hired labor	6.15	5.62	6.27	5.19
Machinery & bldg leases	1.79 9.75	1.34 9.14	3.52 9.87	0.94 9.58
RE & pers. property taxes Farm insurance	4.39	4.78	3.38	4.07
Utilities	2.14	2.98	2.14	1.59
Dues & professional fees	1.81	2.08	1.82	1.52
Interest	29.24	43.63	21.72	21.21
Mach & bldg depreciation	12.54	10.49	11.24	14.27
Miscellaneous	2.51	4.62	2.37	2.57
Total overhead expenses per acre	72.48	89.27	64.17	62.45
Total dir & ovhd expenses per acre	165.04 18.95	189.77	158.14	143.79 69.70
Net return per acre	18.95	-38.56	18.30	69.70
Lbr & mgt charge per acre	19.00	18.82	19.18	20.51
Net return over 1br & mgt	-0.06	-57.37	-0.88	49.20
Government payments	14.95	14.93	14.72	15.26
Net return with govt payments	14.90	-42.45	13.84	64.45
Cost of Production				
Total direct expense per bu.	4.44	5.29	4.62	4.01
Total dir & ovhd exp per bu. With labor & management	7.92 8.84	9.98 10.97	7.78 8.72	7.10 8.11
Total exp less govt & oth income	5.15	8.01	4.95	3.21
Est. labor hours per acre	1.29	1.46	1.35	1.41

TABLE 13 - 10 Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By RoundUp Ready)

Soybeans on Owned Land, Sorted by RoundUp Ready

•	•	1		
	Avg. Of	100%	No	No
	All Farms	RR	RR	Answer
Number of fields	140	0.0	7	
Number of farms	149 110	80 64	7 6	62 43
Trained of Earling	110	04	0	43
Acres	169.91	184.78	160.29	151.82
Yield per acre (bu.)	20.83	21.00	11.64	21.66
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu. Total product return per acre	5.86 122.08	5.94 124.67	5.54	5.77
Miscellaneous income per acre	61.91	57.62	64.43 119.59	124.89 61.76
Gross return per acre	183.99	182.30	184.02	186.65
Direct Expenses Seed	20 11	22 47	14.00	20 20
Fertilizer	30.11 5.70	32.47 5.82	14.06 8.66	28.32 5.14
Crop chemicals	15.87	15.06	23.92	16.18
Crop insurance	11.85	11.59	13.96	12.00
Fuel & oil	9.12	8.70	9.96	9.67
Repairs	14.34	13.69	21.85	14.47
Custom hire	2.26	2.49	0.37	2.12
Hired labor	0.32	0.02	-	0.84
Operating interest Miscellaneous	2.63 0.36	2.93 0.17	3.50	2.05
Total direct expenses per acre	92.56	92.95	96.28	0.70 91.50
Return over direct exp per acre	91.43	89.34	87.75	95.15
Overhead Expenses	0 15	0.14	0 21	
Custom hire Hired labor	2.17 6.15	2.14 5.43	2.31 4.97	2.20
Machinery & bldg leases	1.79	1.22	0.55	7.41 2.84
RE & pers. property taxes	9.75	10.22	9.05	9.09
Farm insurance	4.39	4.48	4.33	4.25
Utilities	2.14	2.15	2.47	2.07
Dues & professional fees	1.81	1.97	1.69	1.58
Interest	29.24	33.84	31.42	21.77
Mach & bldg depreciation Miscellaneous	12.54	12.22	12.62	13.02
Total overhead expenses per acre	2.51 72.48	2.66 76.32	2.08 71.50	2.34 66.57
Total dir & ovhd expenses per acre	165.04	169.28	167.78	158.07
Net return per acre	18.95	13.02	16.24	28.58
Lbr & mgt charge per acre	19.00	18.17	20.07	20.18
Net return over 1br & mgt Government payments	-0.06 14.95	-5.16 14.50	-3.82 16.73	8.40
Net return with govt payments	14.90	9.34	12.90	15.45 23.85
Cost of Production				
Total direct expense per bu. Total dir & ovhd exp per bu.	4.44	4.43	8.27	4.22
With labor & management	7.92 8.84	8.06 8.93	14.41 16.14	7.30 8.23
Total exp less govt & oth income	5.15	5.49	4.43	4.66
				2.03
Est. labor hours per acre	1.29	1.31	1.37	1.26

TABLE 13 - 11 Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Soybeans on Cash Rent

	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of fields	284	46	69	59
Number of farms	177	35	36	36
Acres	358.37	329.07	333.25	400.29
Yield per acre (bu.)	21.39	17.56	22.22	22.78
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu. Total product return per acre	5.97 127.70	5.78 101.54	5.80 128.84	6.37 145.20
Miscellaneous income per acre	61.03	52.68	56.29	77.80
Gross return per acre	188.73	154.21	185.13	223.00
Direct Expenses				
Seed	30.54	31.84	31.86	30.43
Fertilizer	5.89	9.36	4.62	5.96
Crop chemicals	14.15	16.85	12.46	13.12
Crop insurance	12.91	13.89	12.75	13.14
Fuel & oil	8.89	9.11	9.19	8.69
Repairs	13.62	15.80	13.37	11.80
Custom hire Hired labor	1.90 0.21	3.76 0.32	1.66	0.81
Land rent	61.24	62.33	59.34	0.61 59.55
Operating interest	2.89	3.89	2.84	2.34
Miscellaneous	0.69	0.50	0.56	0.56
Total direct expenses per acre	152.94	167.65	148.64	147.01
Return over direct exp per acre	35.80	-13.43	36.49	75.99
Overhead Expenses				
Custom hire	1.63	2.81	2.01	0.72
Hired labor	6.43	7.97	6.71	4.90
Machinery & bldg leases Farm insurance	$2.41 \\ 4.42$	1.35 5.28	3.98	1.74
Utilities	2.07	2.73	$4.04 \\ 2.31$	3.86 1.74
Dues & professional fees	1.74	1.98	2.42	1.24
Interest	2.96	3.41	2.68	2.40
Mach & bldg depreciation	12.01	13.71	11.74	11.75
Miscellaneous	2.22	3.31	1.90	1.75
Total overhead expenses per acre	35.89	42.56	37.80	30.10
Total dir & ovhd expenses per acre Net return per acre	188.83 -0.10	210.21 -55.99	186.43 -1.30	177.11 45.89
Net leturn per acre	-0.10	-33.99	-1.30	45.69
Lbr & mgt charge per acre	17.87	18.34	16.62	20.77
Net return over 1br & mgt	-17.96	-74.33	-17.92	25.12
Government payments	14.70 -3.26	15.13 -59.20	13.51	15.19
Net return with govt payments	-3.26	-59.20	-4.41	40.31
Cost of Production				
Total direct expense per bu.	7.15	9.55	6.69	6.45
Total dir & ovhd exp per bu. With labor & management	8.83 9.66	11.97 13.02	8.39 9.14	7.77 8.69
Total exp less govt & oth income	6.12	9.15	6.00	4.60
Est. labor hours per acre	1.26	1.32	1.19	1.29

Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By RoundUp Ready)

Soybeans on Cash Rent, Sorted by RoundUp Ready

	Avg. Of	100%	No	No
	All Farms	RR	RR	Answer
Number of fields	284	180	15	8.9
Number of farms	177	122	13	54
Acres	358.37	377.08	300.25	330.32
Yield per acre (bu.) Operators share of yield %	21.39 100.00	21.20	19.15	22.18
Value per bu.	5.97	100.00 5.98	100.00 6.03	100.00
Total product return per acre	127.70	126.78	115.43	5.94 131.71
Miscellaneous income per acre	61.03	58.11	89.80	63.37
Gross return per acre	188.73	184.89	205.23	195.08
Dimost Ermanges				
Direct Expenses Seed	30.54	32.64	16.07	27 02
Fertilizer	5.89	6.30	4.76	27.93 5.10
Crop chemicals	14.15	13.28	25.66	14.40
Crop insurance	12.91	12.54	12.13	13.89
Fuel & oil	8.89	8.36	10.05	9.94
Repairs	13.62	12.65	16.74	15.36
Custom hire	1.90	2.36	1.91	0.84
Hired labor	0.21	0.06	_	0.60
Land rent	61.24	62.54	56.86	58.92
Operating interest	2.89	2.88	3.23	2.87
Miscellaneous	0.69	0.53	-	1.17
Total direct expenses per acre	152.94	154.14	147.40	151.02
Return over direct exp per acre	35.80	30.76	57.82	44.06
Overhead Expenses				
Custom hire	1.63	1.31	0.68	2.50
Hired labor	6.43	6.46	4.33	6.69
Machinery & bldg leases	2.41	2.23	1.48	2.94
Farm insurance	4.42	4.47	3.60	4.46
Utilities	2.07	2.09	2.49	1.96
Dues & professional fees	1.74	1.80	1.57	1.65
Interest	2.96	2.81	2.85	3.33
Mach & bldg depreciation	12.01	10.83	14.01	14.41
Miscellaneous	2.22	2.27	2.66	2.05
Total overhead expenses per acre	35.89	34.27	33.67	39.99
Total dir & ovhd expenses per acre Net return per acre	188.83 -0.10	188.40 -3.51	181.07 24.16	191.01 4.07
Net retain per acre	0.10	3.31	24.10	4.07
Lbr & mgt charge per acre	17.87	15.98	20.61	21.81
Net return over lbr & mgt	-17.96	-19.49	3.55	-17.74
Government payments	14.70	14.57	15.50	14.88
Net return with govt payments	-3.26	-4.92	19.05	-2.86
Cost of Production				
Total direct expense per bu.	7.15	7.27	7.70	6.81
Total dir & ovhd exp per bu.	8.83	8.89	9.45	8.61
With labor & management	9.66	9.64	10.53	9.59
Total exp less govt & oth income	6.12	6.21	5.03	6.07
Est. labor hours per acre	1.26	1.21	1.28	1.38
Louis por doro	1.20	2.22	1.20	1.50

Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Soybeans on Share Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	49	10	7	10
Number of farms	33	6	6	7
Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Miscellaneous income per acre Gross return per acre	153.47	106.88	312.00	113.59
	30.55	28.72	34.16	29.76
	67.76	66.70	68.16	67.36
	5.75	5.60	5.59	6.26
	119.00	107.22	130.16	125.41
	13.76	14.45	15.10	23.69
	132.75	121.67	145.26	149.10
Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	32.37	33.38	31.89	31.89
	2.92	1.37	2.54	3.37
	12.18	15.12	11.83	9.53
	10.45	12.49	11.65	12.17
	9.25	9.23	11.06	4.87
	15.12	22.40	15.37	9.40
	2.73	3.52	2.76	5.88
	2.55	4.53	1.40	4.10
	0.41	0.19	1.27	0.07
	87.98	102.23	89.75	81.27
	44.77	19.44	55.51	67.83
Overhead Expenses Custom hire Hired labor Machinery & bldg leases Farm insurance Utilities Hauling and trucking Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre	1.47 8.70 4.29 4.41 2.37 0.08 1.96 2.37 13.05 2.82 41.53 129.51 3.24	8.23 11.38 10.25 5.65 2.71 - 2.74 4.25 10.94 4.74 60.90 163.13 -41.45	0.32 15.16 7.37 6.63 3.27 - 3.19 2.02 16.99 2.82 57.76 147.51 -2.25	-0.48 1.35 2.80 1.11 0.74 0.56 1.34 2.36 10.49 2.13 22.39 103.66 45.44
Lbr & mgt charge per acre	20.28	17.30	-26.01	16.82
Net return over lbr & mgt	-17.04	-58.75		28.62
Government payments	10.06	9.66		11.15
Net return with govt payments	-6.98	-49.09		39.77
Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. With labor & management Total exp less govt & oth income Est. labor hours per acre	4.25	5.34	3.85	4.06
	6.26	8.52	6.34	5.17
	7.24	9.42	7.36	6.01
	6.08	8.16	6.27	4.27
_				

Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Soybeans, Food on Cash Rent

	Avg. Of All Farms
Number of fields Number of farms	6 6
Acres	205.72
Yield per acre (bu.)	18.16
Operators share of yield %	100.00
Value per bu.	6.43
Total product return per acre	116.85
Miscellaneous income per acre	54.26
Gross return per acre	171.11
Direct Expenses	
Seed	10.49
Crop chemicals	27.23
Crop insurance Fuel & oil	10.09
	6.39
Repairs Custom hire	12.05 1.72
Land rent	58.51
Operating interest	3.64
Total direct expenses per acre	130.10
Return over direct exp per acre	41.01
Custom hire Hired labor Machinery & bldg leases Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre	0.13 4.59 1.85 5.33 1.94 3.87 3.61 9.96 1.81 33.08 163.18 7.93
Lbr & mgt charge per acre	13.19
Net return over lbr & mgt Government payments	-5.26 13.64
Net return with govt payments	8.38
Cost of Production	8.38
Total direct expense per bu.	7.16
Total dir & ovhd exp per bu.	8.99
With labor & management	9.71
Total exp less govt & oth income	5.97
Est. labor hours per acre	1.14

Crop Enterprise Analysis

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Sugar Beets on Owned Land, Excluding Joint venture

23, 22002 0 1	7 05		is volloure	
	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	53	9	12	13
Number of farms	47	9	10	. 10
Acres	116.71	177.96	82.58	86.94
Yield per acre (ton)	19.97	18.48	19.17	22.23
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton Total product return per acre	36.24 723.86	34.09 629.91	35.59 682.42	37.09 824.45
Miscellaneous income per acre	19.67	12.10	72.74	5.18
Gross return per acre	743.52	642.01	755.17	829.63
Direct Expenses				
Seed	50.34	47.90	56.20	48.94
Fertilizer	37.64	34.86	50.19	36.59
Crop chemicals	113.53	112.82	131.34	108.68
Crop insurance Fuel & oil	19.26	22.52	19.70	14.73
Repairs	42.19 66.21	45.17 90.36	37.97	36.93
Custom hire	17.38	6.07	$60.48 \\ 4.11$	42.98 15.77
Hired labor	27.51	28.21	32.04	20.94
Operating interest	9.52	12.11	13.45	4.41
Miscellaneous	3.53	5.88	1.00	6.42
Total direct expenses per acre	387.12	405.89	406.48	336.39
Return over direct exp per acre	356.41	236.12	348.68	493.23
Overhead Expenses	_			
Custom hire	7.61	16.68	16.70	1.46
Hired labor	34.45	33.41	33.38	30.08
Machinery & bldg leases RE & pers. property taxes	8.28 11.19	6.58 12.56	$2.14 \\ 12.24$	8.42 10.84
Farm insurance	5.70	7.34	4.59	6.74
Utilities	6.58	7.51	5.95	7.25
Dues & professional fees	6.11	8.33	6.89	7.98
Interest	38.93	48.19	40.27	22.68
Mach & bldg depreciation	63.37	66.54	60.75	51.64
Miscellaneous	7.47	9.53	7.49	6.23
Total overhead expenses per acre	189.68	216.67	190.40	153.32
Total dir & ovhd expenses per acre		622.56	596.88	489.71
Net return per acre	166.73	19.45	158.28	339.91
Lbr & mgt charge per acre	78.22	72.18	86.35	98.07
Net return over 1br & mgt	88.50	-52.72	71.93	241.84
Government payments	15.24	16.61	14.70	14.78
Net return with govt payments	103.75	-36.11	86.63	256.62
Cost of Production				
Total direct expense per ton	19.38	21.97	21.20	15.13
Total dir & ovhd exp per ton	28.88	33.70	31.13	22.03
With labor & management Total exp less govt & oth income	32.79 31.05	37.60 36.05	35.63 31.07	26.44 25.55
Est. labor hours per acre	5.47	5.99	5.36	6.05

TABLE 13 - 16 Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Sugar Beets on Owned Land - Joint venture

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	28	6	5	6
Number of farms	25	5	5	5
Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Miscellaneous income per acre Gross return per acre	115.62	72.75	182.84	124.05
	18.98	15.57	17.63	21.37
	100.00	100.00	100.00	100.00
	37.77	37.04	39.10	38.03
	716.95	576.73	689.16	812.74
	25.90	18.16	77.25	0.45
	742.85	594.90	766.41	813.19
Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Hired labor Stock lease (joint venture) Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	47.55	49.21	46.62	45.88
	32.66	33.00	25.74	30.25
	109.68	113.27	106.72	109.59
	18.43	15.55	23.58	13.39
	34.86	46.52	27.43	36.39
	65.72	78.61	80.33	67.52
	14.56	9.59	19.78	1.74
	25.08	25.03	25.96	18.33
	198.20	213.25	213.80	188.68
	13.84	14.24	24.94	7.27
	2.68	6.82	4.01	2.73
	563.26	605.10	598.90	521.76
	179.60	-10.20	167.51	291.43
Overhead Expenses Custom hire Hired labor Machinery & bldg leases RE & pers. property taxes Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre	5.81 23.69 14.07 9.18 5.20 5.48 5.66 42.07 48.62 6.13 165.92 729.18 13.67	18.67 28.16 0.86 10.46 7.16 8.42 11.06 32.38 66.06 10.80 194.02 799.12 -204.22	25.21 13.11 9.29 8.46 5.52 3.51 47.50 51.65 1.86 166.12 765.02 1.40	8.53 23.65 3.62 7.63 2.61 5.62 7.42 29.72 44.45 6.79 140.04 661.80 151.39
Lbr & mgt charge per acre	65.47	74.50	53.10	66.42
Net return over lbr & mgt	-51.80	-278.72	-51.71	84.98
Government payments	12.68	16.45	12.76	12.77
Net return with govt payments	-39.12	-262.27	-38.95	97.75
Cost of Production Total direct expense per ton Total dir & ovhd exp per ton With labor & management Total exp less govt & oth income	29.67	38.86	33.98	24.41
	38.41	51.32	43.40	30.97
	41.86	56.11	46.41	34.07
	39.83	53.89	41.31	33.46
Est. labor hours per acre	5.17 41	6.16	5.25	4.78

Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Sugar Beets on Cash Rent, Excluding Joint venture

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	107	17	23	20
Number of farms	84	16	17	17
Acres	149.89	200.99	147.03	112.86
Yield per acre (ton) Operators share of yield %	19.70 100.00	18.07 100.00	19.96 100.00	23.20 100.00
Value per ton	36.10	34.61	37.03	37.29
Total product return per acre	711.14	625.31	739.04	865.10
Miscellaneous income per acre Gross return per acre	16.36 727.50	17.90 643.22	19.82 758.86	8.85 873.94
Direct Expenses				
Seed Fertilizer	49.78 36.40	51.48 34.48	47.96 40.01	47.28 36.71
Crop chemicals	112.02	118.95	119.02	113.59
Crop insurance	17.91	23.02	18.02	14.10
Fuel & oil	40.59	42.06	39.13	41.70
Repairs	71.40	84.67	78.40	60.10
Custom hire Hired labor	12.63 25.61	14.30 24.33	12.21 32.71	15.29 26.49
Land rent	73.10	67.41	75.79	75.07
Operating interest	9.18	12.05	7.07	7.00
Miscellaneous	5.69	7.09	3.45	0.69
Total direct expenses per acre	454.30	479.84	473.77	438.02
Return over direct exp per acre	273.19	163.37	285.09	435.92
Overhead Expenses		•		
Custom hire	6.36	8.17	6.04	4.22
Hired labor	38.43	37.51	43.40	30.54
Machinery & bldg leases Farm insurance	8.55 6.29	9.41 8.11	14.83 7.58	1.91 4.22
Utilities	8.00	10.68	7.74	6.28
Dues & professional fees	7.28	7.97	5.59	5.31
Interest	17.11	22.65	7.46	9.81
Mach & bldg depreciation	55.39	66.19	57.36	48.71
Miscellaneous Total overhead expenses per acre	8.76 156.17	10.42 181.11	7.15 157.15	6.28 117.28
Total dir & ovhd expenses per acre	610.47	660.95	630.93	555.31
Net return per acre	117.02	-17.74	127.93	318.64
Lbr & mgt charge per acre	87.89	76.70	104.82	74.73
Net return over 1br & mgt	29.14 15.69	-94.44	23.11	243.91
Government payments Net return with govt payments	44.83	18.46 -75.97	14.94 38.05	14.58 258.49
	44.03	73.57	30.03	230.49
Cost of Production Total direct expense per ton	23.06	26.56	23.74	18.88
Total dir & ovhd exp per ton	30.99	36.58	31.61	23.94
With labor & management	35.45	40.83	36.87	27.16
Total exp less govt & oth income	33.83	38.81	35.12	26.15
Est. labor hours per acre	6.27	5.92	5.92	5.46

TABLE 13 - 18 Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Sugar Beets on Cash Rent - Including Joint venture

	Arra Of			
	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	108	21	24	1.8
Number of farms	72	14	15	15
Acres	164.42	180.49	183.90	105.38
Yield per acre (ton)	19.59	18.90	18.71	23.00
Operators share of yield %	100.00 36.52	100.00	100.00	100.00
Value per ton Total product return per acre	715.61	35.44 669.77	36.58 684.57	38.42 883.49
Miscellaneous income per acre	22.81	23.74	30.23	9.23
Gross return per acre	738.41	693.50	714.80	892.72
Direct Expenses				
Seed	51.84	50.72	47.82	49.10
Fertilizer	35.84	35.17	34.17	31.88
Crop chemicals	113.32	126.02	108.13	109.31
Crop insurance	17.51	17.75	18.96	13.90
Fuel & oil	38.86	46.58	35.53	36.73
Repairs	60.19	76.65	46.25	60.48
Custom hire Hired labor	12.29 21.85	8.31 21.50	11.40 28.95	7.00 16.79
Land rent	68.15	61.12	68.80	64.85
Stock lease (joint venture)	189.06	201.77	182.34	181.06
Operating interest	14.20	14.78	16.83	9.54
Miscellaneous	4.04	3.12	4.39	1.03
Total direct expenses per acre	627.13	663.48	603.56	581.66
Return over direct exp per acre	111.28	30.02	111.24	311.06
Overhead Expenses				
Custom hire	7.88	17.86	3.27	7.84
Hired labor	31.39	48.59	25.96	18.10
Machinery & bldg leases	9.65 4.77	15.80 6.75	11.30 3.94	1.55 3.51
Farm insurance Utilities	6.01	9.03	5.91	6.17
Dues & professional fees	5.67	7.73	5.44	6.85
Interest	13.69	15.11	12.57	11.16
Mach & bldg depreciation	45.87	57.91	46.16	40.00
Miscellaneous	9.55	13.52	9.19	6.03
Total overhead expenses per acre	134.48	192.31	123.76	101.21
Total dir & ovhd expenses per acre		855.79	727.32	682.86
Net return per acre	-23.21	-162.29	-12.52	209.86
Lbr & mgt charge per acre	63.91	70.53	52.22	71.89
Net return over lbr & mgt	-87.12	-232.81	-64.75	137.97
Government payments	14.72	16.24	14.32	13.60
Net return with govt payments	-72.40	-216.58	-50.43	151.57
Cost of Production	22 01	25 11	22.25	25 20
Total direct expense per ton Total dir & ovhd exp per ton	32.01 38.87	35.11 45.28	32.25 38.87	25.29 29.69
With labor & management	42.13	49.01	41.66	32.82
Total exp less govt & oth income	40.22	46.90	39.28	31.83
Est. labor hours per acre	5.30	6.36	4.62	4.77
-	43			

TABLE 13 - 19
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2004
(Farms Sorted By Net Return)

Sunflowers on Cash Rent

	Avg. Of All Farms
Number of fields Number of farms	11 10
Acres Yield per acre (cwt.) Operators share of yield % Value per cwt. Total product return per acre Miscellaneous income per acre Gross return per acre	142.84 11.67 100.00 14.03 163.76 21.56 185.32
Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Drying fuel Fuel & oil Repairs Custom hire Land rent Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	17.76 24.57 12.91 12.31 0.87 11.44 18.76 4.60 52.49 4.52 0.94 161.16 24.16
Overhead Expenses Custom hire Hired labor Machinery & bldg leases Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre	1.36 4.32 2.68 1.55 1.73 1.34 3.71 11.05 2.11 29.85 191.02 -5.70
Lbr & mgt charge per acre Net return over lbr & mgt Government payments Net return with govt payments	17.91 -23.61 15.64 -7.97
Cost of Production Total direct expense per cwt. Total dir & ovhd exp per cwt. With labor & management Total exp less govt & oth income Est. labor hours per acre	13.81 16.37 17.90 14.71

Crop Enterprise Analysis

Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Sunflowers, Confectionary on Cash Rent

Sunflowers, Confectionary on C	ash Rent
	Avg. Of
	All Farms
	TILL LOLING
Number of fields	10
Number of farms	9
Acres	287.24
Yield per acre (cwt.)	7.93
Operators share of yield %	100.00
Value per cwt.	17.62
Total product return per acre	139.68
Miscellaneous income per acre	67.98
Gross return per acre	207.66
Direct Expenses	
Seed	22.66
Fertilizer	27.41
Crop chemicals	23.96
Crop insurance	10.84
Drying fuel	2.49
Fuel & oil	11.33
Repairs	20.29
Custom hire	3.85
Land rent	65.59
Machinery & bldg leases	0.55
Operating interest	3.45
Miscellaneous	0.08
Total direct expenses per acre	192.49
Return over direct exp per acre	15.17
Overhead Expenses	
Custom hire	3.23
Hired labor	8.01
Machinery & bldg leases	2.59
Farm insurance	4.52
Utilities	2.50
Dues & professional fees	2.32
Interest	3.59
Mach & bldg depreciation	13.96
Miscellaneous	1.50
Total overhead expenses per acre	42.22
Total dir & ovhd expenses per acre	
Net return per acre	-27.05
Lbr & mgt charge per acre	20.05
Net return over 1br & mgt	-47.10
Government payments	15.13
Net return with govt payments	-31.97
and a part bal manage	
Cost of Production	
Total direct expense per cwt.	24.28
Total dir & ovhd exp per cwt.	29.61
With labor & management	32.14
Total exp less govt & oth income	21.65
Est. labor hours per acre	1.50
45	
4 3	

Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Wheat, Spring on Owned Land

,	J			
	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of fields	128	27	24	29
Number of farms	108	21	21	22
Acres	189.41	192.93	186.38	150.28
Yield per acre (bu.)	63.62	59.96	61.65	67.04
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.45	3.25	3.60	3.61
Total product return per acre Miscellaneous income per acre	219.65 3.88	194.85 5.83	222.15	241.71
Gross return per acre	223.53	200.68	2.07 224.21	2.54 244.25
Globb letain per acre	223,33	200.00	224.21	244,25
Direct Expenses				
Seed	12.67	14.35	11.72	11.50
Fertilizer	34.73	37.18	36.41	32.49
Crop chemicals	21.51	31.86	16.54	15.59
Crop insurance	9.65	9.96	8.33	8.24
Drying fuel	0.61	1.80	0.22	0.03
Fuel & oil	8.22	8.50	7.92	7.51
Repairs	12.99	13.96	10.63	10.60
Custom hire	3.92	2.20	2.79	5.30
Operating interest	2.68	3.22	2.43	1.13
Miscellaneous	0.56	0.61	0.23	1.26
Total direct expenses per acre	107.54	123.64	97.21	93.65
Return over direct exp per acre	115.99	77.05	127.00	150.60
Overhead Expenses				
Custom hire	1.56	2.60	0.64	1.53
Hired labor	6.86	7.33	8.30	5.19
Machinery & bldg leases	1.47	1.30	1.30	2.17
RE & pers. property taxes	10.14	11.33	8.59	9.28
Farm insurance	4.62	5.73	3.65	3.51
Utilities	1.88	2.18	1.77	1.50
Dues & professional fees	1.62	2.45	1.39	1.73
Interest	28.84	36.77	38.76	14.47
Mach & bldg depreciation	11.31	12.35	10.27	8.82
Miscellaneous	2.14	2.89	2.25	1.77
Total overhead expenses per acre	70.44	84.92	76.92	49.97
Total dir & ovhd expenses per acre	177.98	208.55	174.13	143.62
Net return per acre	45.56	-7.87	50.08	100.63
Lbr & mgt charge per acre	16.42	16.89	14.56	17.04
Net return over 1br & mgt	29.14	-24.76	35.53	83.59
Government payments	14.82	16.23	13.13	14.42
Net return with govt payments	43.95	-8.53	48.66	98.02
J		0,00	10.00	30.02
Cost of Production				
Total direct expense per bu.	1.69	2.06	1.58	1.40
Total dir & ovhd exp per bu.	2.80	3.48	2.82	2.14
With labor & management	3.06	3.76	3.06	2.40
Total exp less govt & oth income	2.76	3.39	2.81	2.14
Est. labor hours per acre	1.19	1.26	1.16	1.15
remore moure per dore	1.17	1.20	1.10	1.15

TABLE 13 - 22 Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Wheat, Spring on Cash Rent

	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of fields	259	52	57	58
Number of farms	171	34	34	35
Acres	324.26	372.09	295.66	237.74
Yield per acre (bu.)	63.64	60.68	65.29	68.59
Operators share of yield % Value per bu.	100.00	100.00	100.00	100.00
Total product return per acre	3.43 218.02	3.12 189.47	3.46	3.63
Miscellaneous income per acre	4.40	4.52	226.08 2.00	248.83 6.22
Gross return per acre	222.42	193.99	228.08	255.04
Direct Expenses				
Seed	12.07	12.28	13.65	11.24
Fertilizer	35.06	37.86	36.59	33.92
Crop chemicals	22.88	33.10	17.73	15.35
Crop insurance	10.40	10.86	10.91	9.57
Drying fuel	0.81	1.73	0.27	0.25
Fuel & oil	8.27	9.10	8.35	7.29
Repairs	12.91	14.39	13.42	10.94
Custom hire	3.57	2.27	3.03	2.86
Land rent	61.27	56.03	65.25	63.55
Operating interest Miscellaneous	2.45 0.74	2.50 0.98	1.94	1.70
Total direct expenses per acre	170.42	181.12	0.16 171.30	0.64 157.33
Return over direct exp per acre	52.00	12.87	56.79	97.72
Overhead Expenses				
Custom hire	1.94	3.54	1.37	2.47
Hired labor	5.99	7.13	6.15	4.60
Machinery & bldg leases	1.95	2.55	2.06	2.18
Farm insurance	4.72	5.75	3.95	3.47
Utilities	1.93	2.26	1.60	1.52
Dues & professional fees	1.65	1.97	1.92	1.50
Interest Mach & bldg depreciation	$2.69 \\ 11.04$	2.78	2.31	2.92
Miscellaneous	2.20	12.47 2.75	10.32 2.00	9.79 1.79
Total overhead expenses per acre	34.11	41.21	31.69	30.24
Total dir & ovhd expenses per acre	204.53	222.33	202.99	187.57
Net return per acre	17.89	-28.34	25.09	67.48
Lbr & mgt charge per acre	16.19	16.05	16.87	15.31
Net return over lbr & mgt	1.71	-44.39	8.23	52.16
Government payments	15.44	16.76	15.52	14.06
Net return with govt payments	17.15	-27.63	23.75	66.23
Cost of Production				
Total direct expense per bu.	2.68	2.98	2.62	2.29
Total dir & ovhd exp per bu.	3.21	3.66	3.11	2.73
With labor & management	3.47	3.93	3.37	2.96
Total exp less govt & oth income	3.16	3.58	3.10	2.66
Est. labor hours per acre	1.19	1.20	1.19	0.97

TABLE 13 - 23 Crop Enterprise Analysis Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Net Return)

Wheat, Spring on Share Rent

	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of fields	51	10	7	9
Number of farms	34	6	7	7
Acres	129.10	132.60	122.46	164.30
Yield per acre (bu.)	64.70	61.83	64.64	66.83
Operators share of yield %	66.77	64.41	64.46	66.12
Value per bu.	3.42	3.10	3.46	3.50
Total product return per acre	147.75	123.64	144.38	154.63
Miscellaneous income per acre	3.51	-	12.11	4.27
Gross return per acre	151.27	123.64	156.49	158.89
Direct Expenses				
Seed	12.57	12.02	11.98	12.68
Fertilizer	31.71	30.93	33.14	35.57
Crop chemicals	17.19	28.94	18.05	12.89
Crop insurance	6.46	7.97	7.39	3.52
Drying fuel Fuel & oil	$0.41 \\ 7.61$	1.60 7.69	- C 13	
Repairs	12.29	10.16	6.13 11.51	5.83 8.52
Custom hire	2.63	1.34	7.42	2.07
Operating interest	2.27	3.00	2.68	1.71
Miscellaneous	0.17	-	-	0.40
Total direct expenses per acre	93.29	103.65	98.29	83.19
Return over direct exp per acre	57.98	19.99	58.20	75.70
Overhead Expenses				
Custom hire	1.27	1.76	0.63	0.01
Hired labor	5.12	5.54	3.54	2.67
Machinery & bldg leases	2.10	2.21	3.42	0.65
Farm insurance	4.95	5.72	3.49	4.46
Utilities	1.90	2.11	1.85	1.47
Dues & professional fees	1.44	2.43	1.57	0.23
Interest	2.48	4.29	2.25	1.21
Mach & bldg depreciation Miscellaneous	10.63 2.10	11.93	9.89	8.44
Total overhead expenses per acre	31.99	2.44 38.44	3.04 29.69	0.90 20.03
Total dir & ovhd expenses per acre	125.27	142.09	127.99	103.22
Net return per acre	25.99	-18.45	28.51	55.67
r			20,02	33.0,
Lbr & mgt charge per acre	16.75	19.11	16.31	15.07
Net return over 1br & mgt	9.24	-37.56	12.20	40.60
Government payments	10.01	10.07	9.43	11.55
Net return with govt payments	19.25	-27.49	21.62	52.15
Cost of Production				
Total direct expense per bu.	2.16	2.60	2.36	1.88
Total dir & ovhd exp per bu.	2.90	3.57	3.07	2.34
With labor & management	3.29	4.05	3.46	2.68
Total exp less govt & oth income	2.97	3.79	2.95	2.32
Est. labor hours per acre	1.05	1.32	0.90	0.96

TABLE 14 - 1 Size of Farm Report Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004

(Farms Sorted By Gross Farm Income)

	Avg. Of	50,001 -	100,001 -	250,001 -	500,001 -	Over
	All Farms	100,000	250,000	500,000	1,000,000	1,000,000
Number of farms	230	6	48	66	73	34
Income Statement						
Gross cash farm income	559,921	69,238	185,898	377,978	667,982	1,342,485
Total cash farm expense	427,807	59,282	152,742	286,476	513,790	1,005,316
Net cash farm income	132,114	9,955	33,156	91,502	154,192	337,168
Inventory change	-21,583	5,819	8,969	-3,594	-28,429	-92,967
Depreciation and capital adjust	-23,587	-2,687	-8,412	-18,951	-28,047	-49,929
Net farm income	86,944	13,087	33,714	68,957	97,716	194,273
Profitability (cost)						
Labor and management earnings	46,428	9,511	22,587	39,848	49,773	96,266
Rate of return on assets	5.5 %	4.8 %	6.3 %	6.4 %	5.6 %	4.8 %
Rate of return on equity	6.1 %	4.0 %	7.2 %	7.3 %	6.2 %	5.1 %
Operating profit margin	12.2 %	9.5 %	12.6 %	14.4 %	12.5 %	10.5 %
Asset turnover rate	45.5 %	51.1 %	50.1 %	44.5 %	45.3 %	45.4 %
Liquidity						
Ending current ratio	1.42	1.07	1.39	1.48	1.36	1.46
Ending working capital	76,945	1,884	29,753	84,160	82,112	138,041
End working capital to gross inc	13.7 %	2.7 %	16.0 %	22.3 %	12.3 %	10.3 %
Term debt coverage ratio	113.9 %	57.3 %	117.9 %	126.4 %	109.6 %	110.6 %
Expense as a percent of income	79.8 %	79.7 %	78.7 %	77.3 %	80.6 %	80.5 %
Interest as a percent of income	4.7 %	6.4 %	6.0 %	5.3 %	4.7 %	3.9 %
Solvency (market)						
Number of sole proprietors	199	6	47	63	62	18
Ending farm assets	1,290,378	190,836	488,987	1,137,533	1,690,807	3,083,041
Ending farm liabilities	618,096	109,705	266,037	518,443	786,586	1,551,494
Ending total assets	1,507,156	304,785	642,219	1,336,606	1,926,931	3,527,976
Ending total liabilities	673,628	146,168	312,918	557 , 284	855,892	1,655,975
Ending net worth	833,527	158,617	329,301	779,322	1,071,039	1,872,001
Net worth change	69,293	4,030	31,859	67,560	82,696	158,381
Ending farm debt to asset ratio	48 %	57 %	54 %	46 %	47 %	50 %
Beg total debt to asset ratio	44 %	40 %	46 %	41 %	45 %	48 %
End total debt to asset ratio	45 %	48 %	49 %	42 %	44 %	47 %
Nonfarm Information						
Net nonfarm income	15,123	22,533	23,778	16,312	10,877	7,567
0 4						
Crop Acres	377	152	189	383	438	564
Total acres owned	1,726	381	796	1,423	1,937	3,539
Total crop acres Total crop acres owned	351	107	149	354	401	591
Total crop acres owned Total crop acres cash rented	1,291	204	567	991	1,443	2,857
Total crop acres cash rented	84	70	80	78	93	91
Total crop acres share rented	04	, ,		, 0	,,	, ,

TABLE 14 - 2 Age of Operator Report Minnesota and North Dakota Farm Business Mgmt. Education Red River Valley, 2004 (Farms Sorted By Age Of Operator)

	Avg. Of	Less				
	All Farms	than 31	31 - 40	41 - 50	51 - 60	Over 60
Number of farms	230	34	37	96	53	10
Income Statement						
Gross cash farm income	559,921	311,811	535,270	635,144	566,029	740,206
Total cash farm expense	427,807	263,633	419,754	488,952	415,221	495,522
Net cash farm income	132,114	48,178	115,516	146,192	150,808	244,685
Inventory change	-21,583	16,381	13,509	-26,555	-43,536	-116,424
Depreciation and capital adjust	-23,587	-7,890	-25,844	-26,904	-23,096	-39,354
Net farm income	86,944	56,669	103,181	92,732	84,175	88,907
Profitability (cost)						
Labor and management earnings	46,428	42,687	72,900	47,315	34,475	16,044
Rate of return on assets	5.5 %	8.3 %	8.0 %	5.6 %	4.1 %	3.5 %
Rate of return on equity	6.1 %	12.1 %	10.8 %	6.1 %	3.9 %	2.0 %
Operating profit margin	12.2 %	12.9 %	14.3 %	12.3 %	10.4 %	10.7 %
Asset turnover rate	45.5 %	64.5 %	55.7 %	45.0 %	39.7 %	32.6 %
Liquidity						
Ending current ratio	1.42	1.36	1.42	1.37	1.62	1.27
Ending working capital	76,945	41,896	67,591	87,339	93,759	41,826
End working capital to gross inc	13.7 %	13.4 %	12.6 %	13.8 %	16.6 %	5.7 %
Term debt coverage ratio	113.9 %	147.2 %	140.5 %	107.9 %	107.7 %	63.9 %
Expense as a percent of income	79.8 %	80.5 %	76.8 %	80.6 %	79.8 %	79.8 %
Interest as a percent of income	4.7 %	4.4 %	4.5 %	4.8 %	4.1 %	6.8 %
Solvency (market)						
Number of sole proprietors	199	33	28	85	46	7
Ending farm assets	1,290,378	564,915	1,117,342	1,558,275	1,376,200	1,585,553
Ending farm liabilities	618,096	345,296	581,511	758,738	552,763	772,030
Ending total assets	1,507,156	664,634	1,253,797	1,790,062	1,703,141	1,769,284
Ending total liabilities	673,628	406,701	642,304	816,504	597,614	821,908
Ending net worth	833,527	257,932	611,493	973,559	1,105,527	947,376
Net worth change	69,293	44,233	71,643	73,956	83,590	27,442
Ending farm debt to asset ratio	48 %	61 %	52 %	49 %	40 %	49 %
Beg total debt to asset ratio	44 %	59 %	52 %	45 %	36 %	49 %
End total debt to asset ratio	45 %	61 %	51 %	46 %	35 %	46 %
Nonfarm Information						
Net nonfarm income	15,123	15,340	9,052	15,757	19,360	8,318
Crop Acres						
Total acres owned	377	124	256	419	485	708
Total crop acres	1,726	1,062	1,735	1,918	1,710	2,198
Total crop acres owned	351	98	258	410	408	698
Total crop acres cash rented	1,291	912	1,400	1,427	1,182	1,435
Total crop acres share rented	84	52	77	81	119	65

Mîr	Avg. Of All Farms (Number of farms 230	Income Statement 559,921 563 Gross cash farm income 427,807 430 Net cash farm income 132,114 132 Inventory change -21,583 -26 Depreciation and capital adjust -23,587 -19 Net farm income 86,944 87	Profitability (cost) Labor and management earnings 46,428 47 Rate of return on assets 5.5 % 5.8 Rate of return on equity 6.1 % 6.00 operating profit margin 12.2 % 12.2 % 47.5 % 47.5 % 47.5 % 47.5 % 47.5 % 47.5 % 47.5 %	Liquidity Ending current ratio Ending working capital End working capital to gross inc 13.7 % 8 Term debt coverage ratio Expense as a percent of income 79.8 % 80 Interest as a percent of income 4.7 % 4	Solvency (market) Number of sole proprietors Ending farm assets Ending total assets Ending total liabilities Ending total liabilities Ending net worth Net worth change Ending farm debt to asset ratio Beg total debt to asset ratio End total debt to asset ratio 44 % Ending farm debt to asset ratio Ending farm debt to asset ratio	Nonfarm Information Net nonfarm income 15,123 15	Crop Acres Total crop acres owned Total crop acres owned Total crop acres cash rented Total crop acres share rented 1,291 Total crop acres share rented 84
TABLE 14 - 3 County Report, 2004 Minnesota and North Dakota Farm Business Mgmt.	Clay Kittson	53 5	563,378 385,425 430,888 363,471 132,489 21,954 -26,160 -18,738 -19,276 -5,103 87,054 -1,886	47,233 -14,778 5.8% -4.4% 6.2% -15.9% 12.2% -6.4% 47.0% 68.7%	1.22 1.52 46,356 53,520 8.2 % 13.9 % 90.8 % -29.9 % 80.7 % 99.1 % 4.7 % 3.0 %	46 692,937 692,937 694,708 773,777 900,930 58,980 45 % - % 45 % - %	15,187 9,209	367 257 1,566 1,451 317 173 1,215 1,278 34
TABLE 14 - 3 County Report, 20 rth Dakota Farm B	Mahnomen	5	499,483 408,117 91,366 35,484 -21,519 105,332	88,485 12.2 % 30.3 % 20.3 % 60.1 %	0.98 -4,867 -1.0 % 158.1 % 76.1 %	4	29,571	576 1,929 560 1,369
3 2004 n Business Mgmt	Marshall	13	472,792 350,744 122,048 -79,963 -22,730 19,354	-2,955 0.9 % -5.9 % 1.9 %	1.39 51,006 10.8 % 44.2 % 89.7 % 7.2 %	988,975 512,870 1,135,043 544,544 590,498 53,529 51,8 61,8	12,738	359 1,743 371 1,360 12
:. Education	Norman	28	550,878 438,746 112,132 -27,153 -20,459 64,519	33,100 4.5 % 3.8 % 9.1 %	1.31 60,925 11.1 % 91.1 % 83.8 % 5.3 %	26 612,010 1,338,173 660,463 677,710 56,373 52 % 49 %	17,657	399 1,815 330 1,407
	Polk	34	753,604 568,860 184,744 -54,886 -29,735	36,821 3.4 % 3.0 % 8.5 % 39.9 %	1.15 25,100 3.3 % 88.2 % 81.5 %	22 718,871 1,598,916 785,913 813,003 50,820 51,8 51,8 51,8	9,284	394 2,125 412 1,660
	Wilkin	75	495,029 376,356 118,673 3,132 -20,915	63,212 7.8 % 10.0 % 17.8 % 43.8 %	1.64 111,420 22.5 % 147.9 % 75.4 %	41 595,929 1,548,647 633,542 915,105 108,598 45 % 41 %	16,314	408 1,417 369 916 133
	Cass	16	462,075 359,516 102,560 2,438 -30,248 74,750	45,503 7.1 % 8.7 % 13.0 % 54.2 %	1.36 78,186 16,9% 176.2% 78.4%	1,066,969 535,517 1,245,434 589,779 655,655 51,245 47 %	15,961	206 1,932 240 1,649
	Richland	32	555,961 406,070 149,891 -6,960 -29,951 112,980	62,964 6.8 % 7.9 % 15.8 %	1.87 155,468 28.0 % 179.3 % 74.7 % 3.9 %	28 553,507 553,507 1,616,851 573,698 1,043,152 79,201 33 % 33 %	15,692	394 1,773 382 1,168