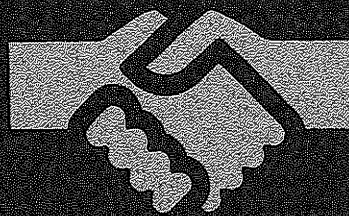
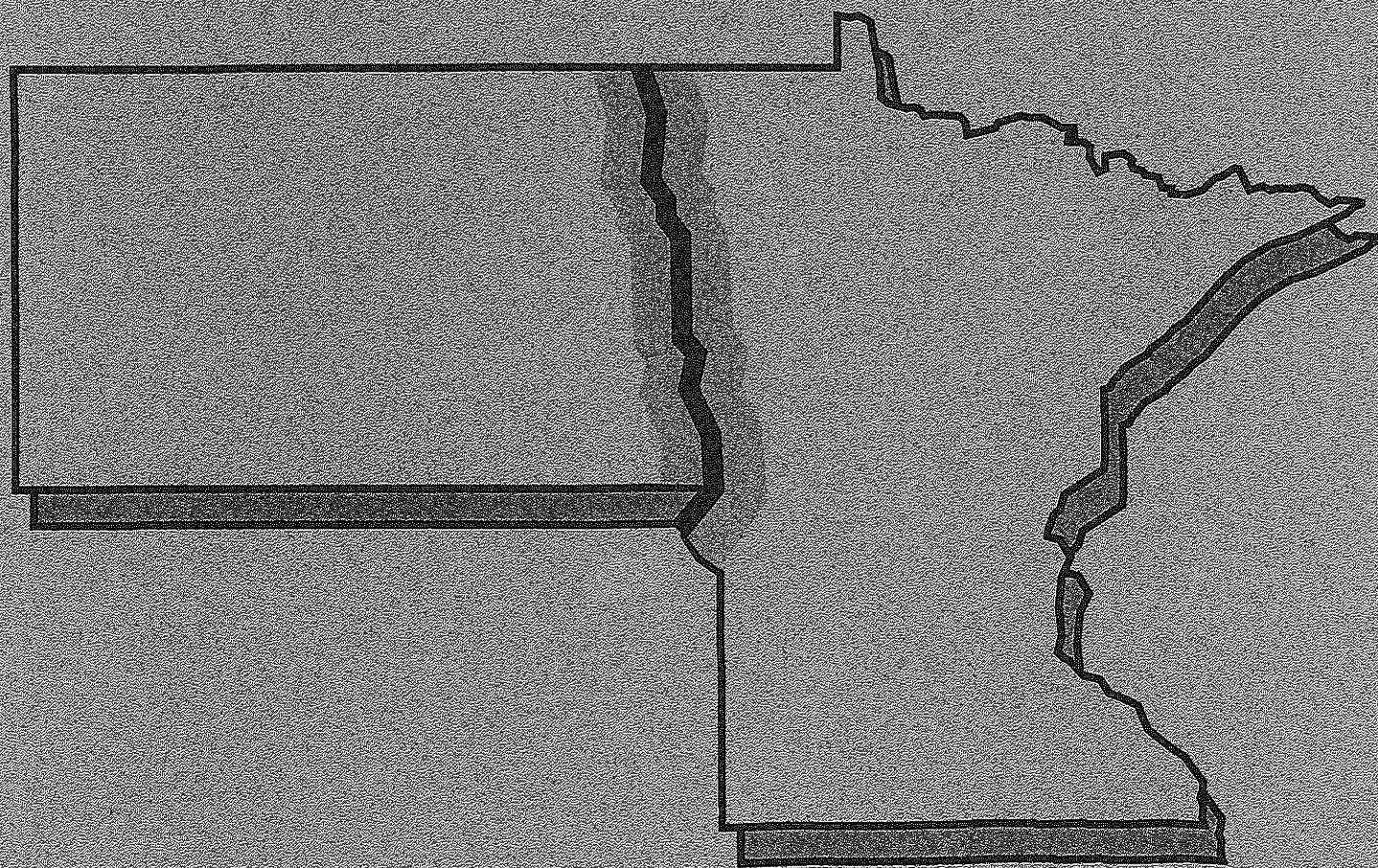


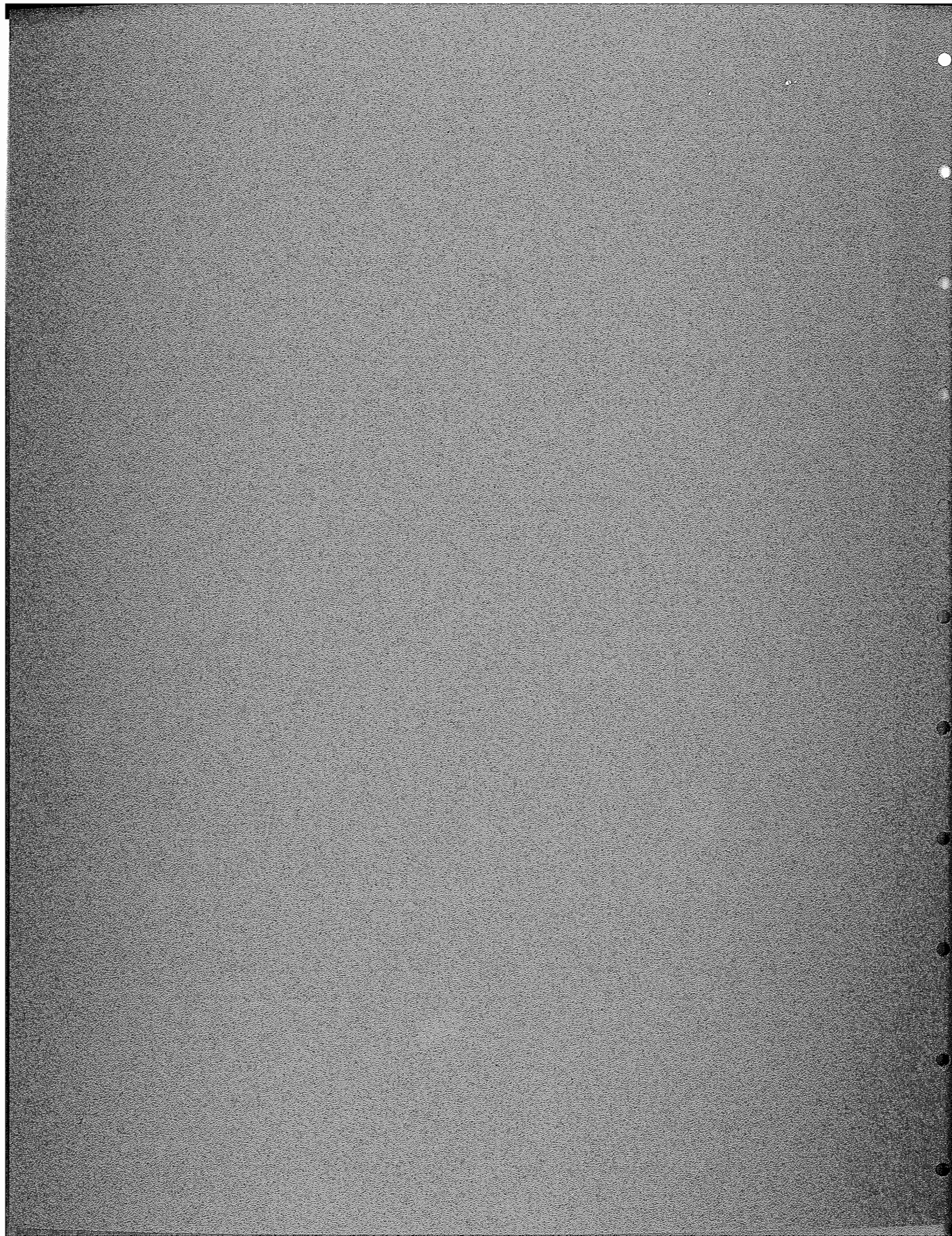
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1997 Red River Valley Report







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RED RIVER VALLEY AVERAGES
1997 ANNUAL REPORT

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1997 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 each section which includes the farm operators' reports, crop reports and livestock reports. Tables 1 through 10 present farm operator information. The table 11 series provide performance information on crop enterprises. Lastly, tables 12-1, 12-2 and 12-3 compares the analysis of farms sorted by total cash farm income, type of farm based on major crop and livestock enterprises, and by age of farm operator, respectively.

The 1997 Red River Valley Report is based upon data generated by the Finan 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 the FINPACK Center located at North Dakota State University, where the comparison tables were generated.

You may contact Robert E. Bollesen, Northland 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 4 and 6 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 5, the Comparative Financial Statement, 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.

Table 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 crop enterprises labeled as "CCC or Reserve" or "Sealed," which refers to crops stored under government programs with the crop value 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 its entire value would be treated as 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 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. "Other Government Payments" refers to all farm government payments other than deficiency and CRP payments.

The second section of Table 1 lists cash 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 cash basis.

The third and fourth 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 which 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 which 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 which is summarized in Table 1. It includes beginning and ending inventories, sales, purchases, and depreciation.

Table 4. Profitability and Liquidity Analysis

Various measures of performance are calculated for the farms in this report. These include measures of profitability and liquidity. (Solvency measures are in Table 5.) In Tables 1-3, no opportunity costs are used. In Table 4, opportunity costs for labor, capital, management are used. The measures and their components are described below.

Profitability

"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 \$20,000 per full time operator plus 5% of gross sales greater than \$200,000 was normally used.

"Return of farm assets" is calculated by adding "Farm interest expense" to "Net farm income" and then subtracting the "Value of operator's labor and management."

"Average farm assets" is the average of beginning and ending total farm assets.

"Return on farm equity" is calculated by subtracting the "Value of operator's labor and management" from "Net farm income."

"Average farm equity" is the average of beginning and ending farm net worth.

"Value of farm production" is gross cash farm income minus purchased feed and feeder livestock and adjusted for inventory changes in crops, market livestock, accounts receivable and breeding livestock.

Liquidity: 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."

Table 5. Balance Sheet

The beginning and ending net worth statements and solvency measures are presented for sole proprietors only in Table 5. 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. 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.

Table 6: Statement of Cash Flows

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

Table 7. Financial Guidelines 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 8. 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 9. Household and Personal Expenses

For those farms that keep records, the household and personal expenses are summarized in Table 9. 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 6 presents calculated family living and includes all farms. Income tax paid is also shown on table 6 and includes all farms.

Table 10. Operator Information, Nonfarm Summary

Table 10 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 not just those reporting nonfarm income.

Table 12-1. Size of Farm Report

Table 12-1 sorts farms according to total cash farm income. Each column, representing a range of cash farm income, gives profitability, liquidity, and solvency analysis as well as family living expense and farm acreage information. A study of each column reveals the number of farms and the various financial characteristics of each group.

Table 12-2. Type of Farm Report

Table 12-2 sorts farms according to type of farm. Each column represents a type of crop or livestock farm or combination of crop and livestock enterprises. Farms with 70% or more of total farm sales from the same enterprise are grouped together. A study of this table reveals the comparative profitability of each farm type.

Table 12-3. Age of Operator Report

Table 12-3 sorts farms according to age of operator. Each column, representing a range of age, gives profitability, liquidity, and solvency analysis as well as family living expense and farm acreage information. A study of each column reveals the number of farms and the various financial characteristics of each group.

TABLE 1
FARM INCOME STATEMENT, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	230	46	46
CASH FARM INCOME			
Barley	10210	15156	11120
Light Red Kidney Beans	273	1367	-
Navy Beans	2883	3038	5196
Pinto Beans	4930	6748	949
Buckwheat	89	-	-
Canola	693	3465	-
Corn	23845	8608	52250
Alfalfa Hay	1323	281	2656
Oats	83	90	27
Potatoes	9493	9954	12447
Seed Potatoes	1209	1898	-
Rye	29	-	-
Soybeans	69697	54199	109067
Straw	870	920	-
Sugar Beets	118473	102733	205053
Sunflowers	2477	3648	5080
Confectionary Sunflowers	751	-	2168
Sweet Corn	36	-	181
Durum Wheat	985	-	3826
Spring Wheat	79652	81538	118375
Winter Wheat	321	-	-
Rented Out	52	-	261
Other crops	643	206	-
Miscellaneous crop income	63	11	-
Beef Calves	424	262	-
Beef Replacement Heifers	43	-	-
Custom Fed Beef	40	-	200
Background Beef	757	858	826
Finish Beef Calves	296	157	-
Finish Yrlg Steers	118	-	-
Milk	302	-	-
Raised Hogs	3238	4134	9358
Feeder Pigs	83	-	-
Finish Feeder Pigs	445	-	-
Lamb Finishing	290	-	-
Cull breeding livestock	303	42	1020
Misc. livestock income	1266	226	4920
Deficiency payments	15237	16639	19718
CRP payments	391	892	944
Other government payments	2465	3581	3511
Custom work income	3909	4807	4312
Patronage dividends, cash	2883	2990	5135
Insurance income	13043	23264	10353
Cash from hedging accts	498	239	1829
Other farm income	9381	16472	8580
Gross Cash Farm Income	384492	368423	599364

TABLE 1
FARM INCOME STATEMENT, 1997 (Continued)
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	230	46	46
CASH FARM EXPENSE			
Seed	22065	21927	34088
Fertilizer	33344	34613	45387
Crop chemicals	42624	41425	64566
Crop insurance	11388	11950	16704
Drying fuel	813	460	1466
Crop marketing	2229	3362	1774
Crop miscellaneous	7076	10875	7569
Feeder livestock purchase	1365	582	-
Purchased feed	2101	1937	4070
Breeding fees	13	9	-
Veterinary	114	139	117
Livestock supplies	284	205	742
Grazing fees	34	4	-
Livestock marketing	33	-	-
Interest	29402	38332	33559
Fuel & oil	14285	14417	19892
Repairs	25360	26317	32713
Custom hire	8629	7319	13546
Hired labor	19358	19333	32017
Land rent	66930	61760	88844
Machinery & bldg leases	5943	4603	8112
Real estate taxes	4477	6320	7193
Farm insurance	4972	5999	6792
Utilities	3894	4281	4788
Dues & professional fees	2271	3062	3193
Hedging account deposits	859	139	2354
Miscellaneous	8597	12180	8589
Total cash expense	318457	331551	438075
Net cash farm income	66034	36872	161289
INVENTORY CHANGES			
Crops and feed	-15696	-41023	-19901
Market livestock	1174	603	2619
Accounts receivable	3044	-2417	19977
Prepaid expenses and supplies	-214	-4240	2033
Accounts payable	-3840	-9394	-1466
Total inventory change	-15532	-56470	3263
Net operating profit	50502	-19598	164552
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS			
Breeding livestock	-133	-533	-468
Machinery and equipment	-17744	-22126	-27983
Buildings and improvements	-881	-982	-1955
Other farm capital	5446	1964	16124
Total depr. and other capital adj	-13312	-21677	-14282
Net farm income	37189	-41276	150269

TABLE 2
INVENTORY CHANGES, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	230	46	46
Net cash farm income	66034	36872	161289
CROPS AND FEED			
Ending inventory	156043	124999	272212
Beginning inventory	171740	166022	292113
Inventory change	-15696	-41023	-19901
MARKET LIVESTOCK			
Ending inventory	3818	4581	4062
Beginning inventory	2645	3977	1443
Inventory change	1174	603	2619
ACCTS RECEIVABLE & OTHER CURRENT ASSETS			
Ending inventory	22242	16181	57234
Beginning inventory	19198	18598	37257
Inventory change	3044	-2417	19977
PREPAID EXPENSES AND SUPPLIES			
Ending inventory	23323	19446	46334
Beginning inventory	23537	23686	44301
Inventory change	-214	-4240	2033
ACCOUNTS PAYABLE			
Beginning inventory	20226	25472	16871
Ending inventory	24066	34866	18337
Inventory change	-3840	-9394	-1466
Total inventory change	-15532	-56470	3263
Net operating profit	50502	-19598	164552

TABLE 3
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	230	46	46
Net operating profit	50502	-19598	164552
BREEDING LIVESTOCK			
Ending inventory	3115	1707	4608
Capital sales	473	475	254
Beginning inventory	3297	2715	4417
Capital purchases	424	-	913
Depreciation, capital adj.	-133	-533	-468
MACHINERY AND EQUIPMENT			
Ending inventory	193538	214060	298056
Capital sales	1532	2330	889
Beginning inventory	180651	204452	266519
Capital purchases	32162	34064	60409
Depreciation, capital adj.	-17744	-22126	-27983
BUILDINGS AND IMPROVEMENTS			
Ending inventory	36921	29676	75634
Capital sales	91	-	-
Beginning inventory	33651	30446	64335
Capital purchases	4243	212	13254
Depreciation, capital adj.	-881	-982	-1955
OTHER CAPITAL ASSETS			
Ending inventory	144672	129987	267589
Capital sales	3971	5926	4569
Beginning inventory	115577	113908	201698
Capital purchases	27620	20041	54336
Depreciation, capital adj.	5446	1964	16124
Total depreciation, capital adj.	-13312	-21677	-14282
Net farm income	37189	-41276	150269

TABLE 4
 PROFITABILITY AND LIQUIDITY ANALYSIS, 1997
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	230	46	46
PROFITABILITY (Cost)			
Net farm income	37189	-41276	150269
Labor and management earnings	12494	-62747	95004
Rate of return on assets	4.8 %	-3.0 %	10.7 %
Rate of return on equity	2.2 %	-20.3 %	12.4 %
Operating profit margin	10.7 %	-8.3 %	24.8 %
Asset turnover rate	45.0 %	36.6 %	43.2 %
Interest on farm net worth	24696	21472	55266
Farm interest expense	30810	42492	34097
Value of operator lbr and mgmt.	28367	27864	36373
Return on farm assets	39632	-26647	147993
Average farm assets	821819	880374	1382735
Return on farm equity	8823	-69139	113896
Average farm equity	406069	340620	919564
Value of farm production	369415	322534	597521
Number of Farms	230	46	46
LIQUIDITY (Cash)			
Net cash farm income	66034	36872	161289
Net nonfarm income	13124	14836	10530
Family living and taxes	47171	40290	79160
Real estate principal payments	8711	8926	14706
Cash available for interm. debt	23276	2492	77954
Average intermediate debt	135015	176378	125117
Years to turnover interm. debt	5.8	70.8	1.6
Expense as a % of income	83 %	90 %	73 %
Interest as a % of income	8 %	10 %	6 %
LIQUIDITY (Accrual)			
Total accrual farm income	373013	325586	602059
Total accrual farm expense	322511	345185	437508
Net accrual operating income	50502	-19598	164552
Net nonfarm income	13124	14836	10530
Family living and taxes	47171	40290	79160
Real estate principal payments	8711	8926	14706
Available for intermediate debt	7744	-53978	81216
Average intermediate debt	135015	176378	125117
Years to turnover interm. debt	17.4	**	1.5
Expense as a % of income	86 %	106 %	73 %
Interest as a % of income	8 %	13 %	6 %

** Income insufficient to meet debt servicing requirements

TABLE 5
BALANCE SHEET AT COST VALUES, 1997
Minnesota and North Dakota Farm Business Mgmt Education
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 20 %		Average Of High 20 %	
	203		38		34	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
ASSETS						
Current Farm Assets						
Cash and checking balance	8629	8136	9273	11687	8830	8268
Prepaid expenses & supplies	20493	20350	19203	14710	41001	43734
Growing crops	53	298	202	838	-	694
Accounts receivable	14624	16714	15110	15131	28538	43215
Hedging accounts	551	607	207	155	1937	2038
Crops held for sale or feed	134646	124444	128499	95333	216818	209946
Crops under government loan	10677	6365	17795	8374	8254	2591
Market livestock held for sale	2993	4320	4797	5514	1953	5495
Other current assets	3219	2928	3847	1279	8967	10271
Total current farm assets	195886	184161	198933	153020	316297	326254
Intermediate Farm Assets						
Breeding livestock	3417	3121	2732	1548	4690	4375
Machinery and equipment	160840	171458	196786	200074	229423	262028
Other intermediate assets	73781	94808	75442	88692	114191	159673
Total intermediate farm assets	238037	269387	274960	290313	348305	426077
Long-Term Farm Assets						
Farm land	229779	238366	312326	326212	422702	430161
Buildings and improvements	31253	34083	32104	31141	69821	79774
Other long-term assets	24302	29871	20805	22853	72523	88582
Total long-term farm assets	285334	302319	365235	380207	565045	598516
Total Farm Assets	719257	755868	839128	823541	1229647	1350847
Total Nonfarm Assets	102291	113133	88293	91249	206100	240946
Total Assets	821549	869001	927421	914790	1435747	1591793
LIABILITIES						
Current Farm Liabilities						
Accrued interest	7815	9194	12750	15894	6357	6936
Accounts payable	10780	13494	12992	17939	10322	12277
Current notes	86938	94859	118896	134284	78470	82145
Government crop loans	1876	1456	541	0	4967	680
Principal due on term debt	24348	28719	31353	33508	29177	38322
Total current farm liabilities	131863	147782	176667	201758	129293	140377
Intermediate Farm Liabilities	92626	106982	131103	145969	79574	109518
Long-term Farm Liabilities	134022	140883	170750	176706	215075	224675
Total Farm Liabilities	358510	395647	478521	524433	423941	474570
Total Nonfarm Liabilities	15578	17153	7716	9158	15082	15176
Total Liabilities	374088	412800	486237	533591	439023	489746
Net Worth (farm and nonfarm)	447460	456201	441184	381199	996724	1102047
Net Worth Change		8741		-59985		105324
RATIO ANALYSIS						
Current Farm Liabilities / Assets	67 %	80 %	89 %	132 %	41 %	43 %
Curr. & Interm Farm Liab / Assets	52 %	56 %	65 %	78 %	31 %	33 %
Long Term Farm Liab. / Assets	47 %	47 %	47 %	46 %	38 %	38 %
Total Liabilities / Assets	46 %	48 %	52 %	58 %	31 %	31 %

TABLE 6
STATEMENT OF CASH FLOWS, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted by Net Farm Income)

		Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms		230	46	46
(a) Beginning cash balance (farm & nonfarm)		14422	15164	17382
CASH FROM OPERATING ACTIVITIES				
Gross cash farm income		384492	368423	599364
Net nonfarm income	(+)	13124	14836	10530
Total cash farm expense	(-)	318457	331551	438075
Apparent family living expense	(-)	35129	31854	49972
Income and social security tax	(-)	11094	8436	26552
(b) Cash from operations	(=)	32935	11418	95296
CASH FROM INVESTING ACTIVITIES				
Sale of breeding livestock		473	475	254
Sale of machinery & equipment	(+)	1532	2330	889
Sale of farm land	(+)	1323	4354	-
Sale of farm buildings	(+)	91	-	-
Sale of other farm assets	(+)	3971	5926	4569
Sale of nonfarm assets	(+)	2457	3874	3325
Purchase of breeding livestock	(-)	424	-	913
Purchase of machinery & equip.	(-)	32162	34064	60409
Purchase of farm land	(-)	8985	16417	5530
Purchase of farm buildings	(-)	4243	212	13254
Purchase of other farm assets	(-)	27620	20041	54336
Purchase of nonfarm assets	(-)	9353	5643	19656
(c) Cash from investing activities	(=)	-72940	-59417	-145061
CASH FROM FINANCING ACTIVITIES				
Money borrowed		241107	301729	291341
Cash gifts and inheritances	(+)	2022	2332	3057
Principal payments	(-)	202935	257128	241061
Dividends paid	(-)	948	-	2637
Gifts given	(-)	89	28	23
(d) Cash from financing activities	(=)	39157	46904	50678
(e) Net change in cash balance (b+c+d)		-847	-1095	913
Ending cash balance (farm & nonfarm)		13575	14070	18295

TABLE 7
FINANCIAL GUIDELINES MEASURES, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted by Net Farm Income)

	Average For All Farms		Average For Low 20 %		Average For High 20 %	
Number of Farms	230		46		46	
LIQUIDITY	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current ratio	1.55	1.31	1.18	0.82	2.45	2.30
Working capital	80784	50391	34235	-38474	228873	220672
SOLVENCY (Cost)	Beginning	Ending	Beginning	Ending	Beginning	Ending
Farm debt to asset ratio	49 %	52 %	58 %	65 %	33 %	34 %
Farm equity to asset ratio	51 %	48 %	42 %	35 %	67 %	66 %
Farm debt to equity ratio	97 %	107 %	138 %	183 %	50 %	51 %
PROFITABILITY (Cost)						
Rate of return on farm assets	4.8 %		-3.0 %		10.7 %	
Rate of return on farm equity	2.2 %		-20.3 %		12.4 %	
Operating profit margin	10.7 %		-8.3 %		24.8 %	
Net farm income	37189		-41276		150269	
REPAYMENT CAPACITY	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	106 %	74 %	64 %	-29 %	204 %	210 %
Capital replacement margin	2929	-12604	-21698	-78169	57849	61112
EFFICIENCY						
Asset turnover rate (cost)	45.0 %		36.6 %		43.2 %	
Operating expense ratio	78.2 %		93.0 %		67.0 %	
Depreciation expense ratio	3.6 %		6.7 %		2.4 %	
Interest expense ratio	8.3 %		13.1 %		5.7 %	
Net farm income ratio	10.0 %		-12.7 %		25.0 %	

TABLE 8
CROP PRODUCTION AND MARKETING SUMMARY, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	230	46	46
ACREAGE SUMMARY			
Total Acres Owned	337	442	504
Total Crop Acres	1407	1488	1869
Crop Acres Owned	286	388	456
Crop Acres Cash Rented	1015	1005	1294
Crop Acres Share Rented	105	96	119
Total Pasture Acres	10	1	10
AVERAGE PRICE RECEIVED (Cash Sales Only)			
Wheat, Spring per bu.	3.73	3.42	3.77
Corn per bu.	2.35	-	2.36
Soybeans per bu.	6.77	7.06	7.07
Potatoes per cwt.	3.20	-	-
Barley per bu.	2.01	1.89	2.00
Sugar Beets per ton	42.58	-	43.26
Beans, Pinto per cwt.	17.56	-	-
Beans, Navy per cwt.	14.45	-	-
Sunflowers per cwt.	11.30	-	-
Sunflowers, Confectionary per cwt.	14.52	-	-
AVERAGE YIELD PER ACRE			
Wheat, Spring (bu.)	33.58	29.42	37.26
Soybeans (bu.)	33.64	29.94	37.92
Sugar Beets (ton)	18.47	17.63	19.67
Corn (bu.)	121.31	100.44	144.32
Barley (bu.)	55.07	49.55	63.04
Beans, Pinto (cwt.)	12.63	11.04	-
Beans, Navy (cwt.)	14.59	9.72	18.02
Hay, Alfalfa (ton)	3.01	1.42	-

TABLE 9
HOUSEHOLD AND PERSONAL EXPENSES, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

	Average For All Farms
Number of Sole Proprietors	22
Average family size	4.5
FAMILY LIVING EXPENSES	
Food and meals expense	6251
Medical care and health insurance	3846
Cash donations	1222
Household supplies	3454
Clothing	2614
Personal care	3101
Child / Dependent care	364
Gifts	704
Education	746
Recreation	2459
Utilities (household share)	829
Nonfarm vehicle operating expense	774
Household real estate taxes	271
Household repairs	1039
Nonfarm interest	1533
Life insurance payments	972
Total cash family living expense	30181
Family living from the farm	-
Total family living	30181
OTHER NONFARM EXPENDITURES	
Income taxes	8561
Furnishing & appliance purchases	967
Nonfarm vehicle purchases	4146
Nonfarm real estate purchases	768
Other nonfarm capital purchases	223
Nonfarm savings & investments	3059
Total other nonfarm expenditures	17722
Total cash family living, investment & nonfarm capital purch	47903

TABLE 10
 OPERATOR INFORMATION & NONFARM SUMMARY, 1997
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	230	46	46
OPERATOR INFORMATION			
Average number of operators	1.1	1.1	1.3
Average age of operators	42.0	45.4	43.2
Average number of years farming	18.4	21.5	20.2
NONFARM INCOME			
Nonfarm wages & salary	9287	9233	5917
Nonfarm business income	1264	2223	1631
Nonfarm rental income	493	448	261
Nonfarm interest income	370	465	794
Nonfarm cash dividends	273	15	345
Tax refunds	252	567	65
Gifts and inheritances	2022	2332	3057
Other nonfarm income	1185	1886	1517
Total nonfarm income	15145	17168	13588

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. The last section of each crop table contains economic efficiency measures which provide useful standards or goals for the individual managers and net return per acre including government payments.

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 returns to overhead 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.

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.

The "unit" referred to the "Value per unit" and the efficiency measure at the bottom is the unit of measurement for the principal product from this enterprise. It is "bushel" for corn, soybeans, wheat and oats. It is "ton" for corn silage and hay.

"Total direct costs per unit" and "Total listed costs per unit" are calculated by dividing "Total direct costs per acre" and "Total listed costs per acre," respectively, by "Yield per acre." "Breakeven yield per acre" is "Total listed costs per acre" minus "Miscellaneous income per acre," divided by "Value per unit."

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

TABLE 11 - 1
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SPRING WHEAT ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	161	33	34
Number of farms	121	24	24
Acres	170.52	187.54	128.93
Yield per acre (bushel)	33.10	28.32	40.10
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.63	3.49	3.91
Total product return per acre	120.21	98.94	156.76
Miscellaneous income per acre	11.87	8.92	7.25
Gross return per acre	132.09	107.87	164.01
Direct expenses per acre			
Seed	12.22	11.29	11.61
Fertilizer	30.17	35.42	26.11
Crop chemicals	19.35	24.38	11.53
Crop insurance	7.52	9.03	6.88
Drying fuel	0.30	0.14	0.63
Fuel & oil	6.22	7.63	5.71
Repairs	11.87	14.48	12.05
Custom hire	1.36	0.84	1.51
Hired labor	0.19	0.00	0.00
Machinery & bldg leases	0.13	0.00	0.00
Utilities	0.00	0.00	0.00
Operating interest	4.26	6.50	1.52
Miscellaneous	0.12	0.05	0.11
Total direct expenses per acre	93.73	109.74	77.65
Return over direct expenses per acre	38.36	-1.87	86.36
Overhead expenses per acre			
Custom hire	1.19	1.67	0.63
Hired labor	5.84	4.52	5.77
Machinery & bldg leases	1.50	0.75	2.92
RE & pers. property taxes	13.23	13.56	12.27
Farm insurance	3.37	3.20	3.13
Utilities	1.89	2.43	1.70
Dues & professional fees	0.91	1.27	1.04
Interest	36.62	37.93	28.22
Mach & bldg depreciation	9.03	9.86	6.98
Miscellaneous	2.09	3.20	2.35
Total overhead expenses per acre	75.67	78.40	65.00
Total listed expenses per acre	169.40	188.13	142.65
Net return per acre	-37.32	-80.27	21.36
Total direct expense per bushel	2.83	3.87	1.94
Total listed expense per bushel	5.12	6.64	3.56
Net return per bushel	-1.13	-2.83	0.53
Breakeven yield per acre	43.38	51.29	34.64
Net return including govt. payments	-20.04	-58.77	36.13
Lbr & mgt charge per acre	11.70	14.14	10.32
Net return over lbr & mgt	-31.73	-72.91	25.81

TABLE 11 - 2
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SPRING WHEAT ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	310	64	41
Number of farms	192	38	38
Acres	279.41	438.58	186.75
Yield per acre (bushel)	33.30	27.83	39.11
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.63	3.48	3.86
Other product return per acre	0.01	0.00	0.06
Total product return per acre	120.83	96.77	150.99
Miscellaneous income per acre	9.79	9.24	7.22
Gross return per acre	130.62	106.01	158.21
Direct expenses per acre			
Seed	11.92	11.82	12.12
Fertilizer	30.26	33.62	26.81
Crop chemicals	17.43	23.24	12.12
Crop insurance	7.73	8.68	6.07
Drying fuel	0.32	0.32	0.34
Fuel & oil	6.12	5.95	6.13
Repairs	10.86	12.15	11.88
Custom hire	1.92	0.94	1.71
Hired labor	0.26	0.35	0.21
Land rent	60.33	69.10	50.79
Machinery & bldg leases	0.34	0.01	0.00
Operating interest	4.43	4.55	2.43
Miscellaneous	0.30	0.54	0.10
Total direct expenses per acre	152.07	171.28	130.71
Return over direct expenses per acre	-21.45	-65.27	27.50
Overhead expenses per acre			
Custom hire	1.06	1.74	0.56
Hired labor	5.85	6.79	5.06
Machinery & bldg leases	2.17	2.66	1.75
Farm insurance	2.96	4.12	2.14
Utilities	1.54	1.59	1.63
Dues & professional fees	0.93	0.98	1.00
Interest	4.41	5.58	3.27
Mach & bldg depreciation	7.57	8.43	7.34
Miscellaneous	2.26	2.74	2.47
Total overhead expenses per acre	28.90	34.62	25.23
Total listed expenses per acre	180.97	205.90	155.94
Net return per acre	-50.35	-99.89	2.27
Total direct expense per bushel	4.57	6.15	3.34
Total listed expense per bushel	5.43	7.40	3.99
Net return per bushel	-1.51	-3.59	0.06
Breakeven yield per acre	47.18	56.55	38.52
Net return including govt. payments	-33.30	-80.60	14.56
Lbr & mgt charge per acre	11.72	10.86	12.90
Net return over lbr & mgt	-45.02	-91.46	1.66

TABLE 11 - 3
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SPRING WHEAT ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	71	15	10
Number of farms	39	8	8
Acres	137.60	130.30	138.03
Yield per acre (bushel)	35.43	29.21	42.97
Operators share of yield %	64.29	61.37	65.63
Value per bushel	3.71	3.58	4.00
Total product return per acre	84.86	63.81	112.79
Miscellaneous income per acre	2.80	0.55	7.80
Gross return per acre	87.65	64.35	120.59
Direct expenses per acre			
Seed	9.45	10.75	9.15
Fertilizer	27.84	29.53	29.77
Crop chemicals	13.33	17.72	9.48
Crop insurance	4.57	5.30	4.72
Drying fuel	0.03	0.00	0.00
Fuel & oil	6.36	6.60	5.23
Repairs	12.60	17.81	12.03
Custom hire	2.59	0.64	5.38
Machinery & bldg leases	0.10	0.00	0.00
Operating interest	3.16	3.95	1.35
Miscellaneous	0.16	0.11	0.00
Total direct expenses per acre	80.15	92.17	77.11
Return over direct expenses per acre	7.50	-27.82	43.49
Overhead expenses per acre			
Custom hire	0.13	0.36	0.06
Hired labor	5.63	6.62	6.78
Machinery & bldg leases	2.23	1.96	3.12
Farm insurance	2.31	3.72	2.49
Utilities	1.80	1.68	1.45
Dues & professional fees	0.71	0.63	1.15
Interest	2.94	2.19	2.92
Mach & bldg depreciation	10.61	11.22	9.96
Miscellaneous	3.17	3.92	2.57
Total overhead expenses per acre	29.58	32.54	30.50
Total listed expenses per acre	109.73	124.71	107.61
Net return per acre	-22.07	-60.36	12.98
Total direct expense per bushel	3.52	5.14	2.73
Total listed expense per bushel	4.82	6.96	3.82
Net return per bushel	-0.97	-3.37	0.46
Breakeven yield per acre	44.88	56.57	38.05
Net return including govt. payments	-14.08	-49.90	22.12
Lbr & mgt charge per acre	12.22	12.73	12.68
Net return over lbr & mgt	-26.31	-62.63	9.44

TABLE 11 - 4

Crop Enterprise Analysis, 1997
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted according to Return to Overhead per Acre)

BARLEY ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	39	7	7
Number of farms	36	7	7
Acres	112.06	90.70	84.16
Yield per acre (bushel)	49.89	41.19	78.87
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.91	1.83	2.08
Total product return per acre	95.40	75.44	164.30
Miscellaneous income per acre	14.58	6.35	1.42
Gross return per acre	109.98	81.79	165.71
Direct expenses per acre			
Seed	8.14	9.63	8.94
Fertilizer	26.63	32.85	30.58
Crop chemicals	16.45	19.70	11.00
Crop insurance	7.07	8.02	4.80
Drying fuel	0.22	0.37	0.00
Fuel & oil	6.24	9.02	4.96
Repairs	12.13	17.22	11.21
Custom hire	1.07	0.47	1.27
Hired labor	0.27	0.00	0.00
Operating interest	6.20	8.27	5.42
Miscellaneous	0.28	0.21	0.13
Total direct expenses per acre	84.69	105.78	78.30
Return over direct expenses per acre	25.28	-23.99	87.41
Overhead expenses per acre			
Custom hire	1.57	1.32	0.17
Hired labor	4.56	3.12	6.60
Machinery & bldg leases	2.05	1.86	5.28
RE & pers. property taxes	13.58	14.10	14.14
Farm insurance	3.16	2.51	2.42
Utilities	1.81	3.28	1.87
Dues & professional fees	1.04	1.12	0.84
Interest	32.33	27.33	34.58
Mach & bldg depreciation	8.13	8.93	10.06
Miscellaneous	2.27	3.88	4.23
Total overhead expenses per acre	70.50	67.45	80.21
Total listed expenses per acre	155.19	173.23	158.51
Net return per acre	-45.21	-91.44	7.20
Total direct expense per bushel	1.70	2.57	0.99
Total listed expense per bushel	3.11	4.21	2.01
Net return per bushel	-0.91	-2.22	0.09
Breakeven yield per acre	73.53	91.11	75.42
Net return including govt. payments	-22.30	-74.40	23.63
Lbr & mgt charge per acre	12.53	14.62	10.04
Net return over lbr & mgt	-34.83	-89.02	13.59

TABLE 11 - 5
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

BARLEY ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	73	15	14
Number of farms	65	13	13
Acres	153.33	116.36	138.53
Yield per acre (bushel)	54.67	32.05	63.26
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.91	1.76	2.06
Total product return per acre	104.52	56.26	130.34
Miscellaneous income per acre	14.84	21.59	20.95
Gross return per acre	119.36	77.85	151.30
Direct expenses per acre			
Seed	8.80	8.84	8.92
Fertilizer	28.15	34.09	27.54
Crop chemicals	16.17	18.33	11.33
Crop insurance	7.14	7.63	6.82
Drying fuel	0.06	0.00	0.00
Fuel & oil	5.98	5.02	6.24
Repairs	10.18	10.91	10.02
Custom hire	1.77	1.11	0.59
Hired labor	0.25	0.13	0.77
Land rent	59.43	67.32	54.70
Operating interest	4.47	5.00	2.83
Miscellaneous	0.09	0.05	0.00
Total direct expenses per acre	142.49	158.43	129.75
Return over direct expenses per acre	-23.13	-80.58	21.54
Overhead expenses per acre			
Custom hire	0.77	1.77	0.39
Hired labor	4.88	2.82	3.71
Machinery & bldg leases	2.13	1.68	1.57
Farm insurance	2.39	2.82	1.72
Utilities	1.54	1.53	1.60
Dues & professional fees	0.89	1.30	0.77
Interest	3.01	3.40	2.17
Mach & bldg depreciation	8.58	8.37	11.08
Miscellaneous	2.05	1.62	2.89
Total overhead expenses per acre	26.24	25.33	25.91
Total listed expenses per acre	168.73	183.76	155.67
Net return per acre	-49.37	-105.90	-4.37
Total direct expense per bushel	2.61	4.94	2.05
Total listed expense per bushel	3.09	5.73	2.46
Net return per bushel	-0.90	-3.30	-0.07
Breakeven yield per acre	80.49	92.36	65.38
Net return including govt. payments	-32.70	-84.79	5.39
Lbr & mgt charge per acre	11.97	10.23	12.74
Net return over lbr & mgt	-44.66	-95.02	-7.34

TABLE 11 - 6
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

BARLEY ON SHARE RENTED LAND

	Average For All Farms
Number of fields	9
Number of farms	8
Acres	115.68
Yield per acre (bushel)	65.89
Operators share of yield %	60.03
Value per bushel	1.94
Total product return per acre	75.71
Miscellaneous income per acre	3.67
Gross return per acre	79.38
Direct expenses per acre	
Seed	4.99
Fertilizer	21.05
Crop chemicals	10.50
Crop insurance	3.82
Fuel & oil	6.18
Repairs	17.18
Custom hire	1.74
Operating interest	2.53
Total direct expenses per acre	67.17
Return over direct expenses per acre	12.21
Overhead expenses per acre	
Custom hire	0.06
Hired labor	3.95
Machinery & bldg leases	0.61
Farm insurance	1.91
Utilities	1.33
Dues & professional fees	0.78
Interest	3.79
Mach & bldg depreciation	9.35
Miscellaneous	2.62
Total overhead expenses per acre	25.22
Total listed expenses per acre	92.40
Net return per acre	-13.02
Total direct expense per bushel	1.70
Total listed expense per bushel	2.34
Net return per bushel	-0.33
Breakeven yield per acre	76.31
Net return including govt. payments	-4.67
Lbr & mgt charge per acre	18.30
Net return over lbr & mgt	-22.98

TABLE 11 - 7
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

NAVY BEANS ON OWNED LAND

	Average For All Farms
Number of fields	9
Number of farms	9
Acres	97.03
Yield per acre (cwt)	13.12
Operators share of yield %	100.00
Value per cwt	12.81
Total product return per acre	168.02
Miscellaneous income per acre	0.00
Gross return per acre	168.02
Direct expenses per acre	
Seed	29.95
Fertilizer	14.21
Crop chemicals	26.64
Crop insurance	15.13
Fuel & oil	10.60
Repairs	16.98
Custom hire	3.39
Hired labor	1.69
Operating interest	3.41
Miscellaneous	0.23
Total direct expenses per acre	122.24
Return over direct expenses per acre	45.79
Overhead expenses per acre	
Custom hire	0.07
Hired labor	8.55
Machinery & bldg leases	1.92
RE & pers. property taxes	13.83
Farm insurance	3.47
Utilities	1.98
Dues & professional fees	1.34
Interest	48.62
Mach & bldg depreciation	14.78
Miscellaneous	2.19
Total overhead expenses per acre	96.75
Total listed expenses per acre	218.99
Net return per acre	-50.96
Total direct expense per cwt	9.32
Total listed expense per cwt	16.69
Net return per cwt	-3.88
Breakeven yield per acre	17.10
Lbr & mgt charge per acre	18.77
Net return over lbr & mgt	-69.73

TABLE 11 - 8
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

NAVY BEANS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	32	8	6
Number of farms	28	6	6
Acres	100.51	143.12	85.11
Yield per acre (cwt)	14.99	7.61	18.21
Operators share of yield %	100.00	100.00	100.00
Value per cwt	12.77	11.09	12.94
Total product return per acre	191.42	84.43	235.64
Miscellaneous income per acre	31.00	70.31	57.76
Gross return per acre	222.42	154.75	293.40
Direct expenses per acre			
Seed	31.55	35.58	30.01
Fertilizer	21.30	18.73	20.51
Crop chemicals	28.11	20.25	35.18
Crop insurance	19.46	18.75	21.17
Fuel & oil	9.70	11.43	8.14
Repairs	19.19	18.26	21.54
Custom hire	4.67	3.04	7.14
Hired labor	2.04	0.00	3.29
Land rent	61.80	66.43	58.48
Machinery & bldg leases	0.61	2.28	0.00
Operating interest	6.03	8.83	6.03
Miscellaneous	0.42	0.18	0.17
Total direct expenses per acre	204.19	201.22	211.66
Return over direct expenses per acre	18.22	-46.47	81.74
Overhead expenses per acre			
Custom hire	1.33	0.79	4.50
Hired labor	9.17	4.74	13.32
Machinery & bldg leases	3.25	4.12	1.25
Farm insurance	3.70	2.78	3.85
Utilities	2.68	2.20	2.60
Dues & professional fees	2.10	3.82	2.29
Interest	7.38	6.88	6.34
Mach & bldg depreciation	14.65	14.58	14.90
Miscellaneous	4.07	2.84	6.68
Total overhead expenses per acre	49.01	45.30	55.72
Total listed expenses per acre	253.21	246.52	267.38
Net return per acre	-30.79	-91.77	26.03
Total direct expense per cwt	13.62	26.43	11.62
Total listed expense per cwt	16.89	32.38	14.68
Net return per cwt	-2.05	-12.05	1.43
Breakeven yield per acre	17.40	15.89	16.20
Lbr & mgt charge per acre	19.06	17.58	23.30
Net return over lbr & mgt	-49.85	-109.35	2.72

TABLE 11 - 9
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

PINTO BEANS ON OWNED LAND

	Average For All Farms
Number of fields	7
Number of farms	7
Acres	98.11
Yield per acre (cwt)	13.11
Operators share of yield %	100.00
Value per cwt	16.26
Total product return per acre	213.13
Miscellaneous income per acre	8.58
Gross return per acre	221.71
Direct expenses per acre	
Seed	25.56
Fertilizer	10.97
Crop chemicals	23.22
Crop insurance	13.32
Fuel & oil	8.79
Repairs	13.38
Custom hire	5.92
Operating interest	5.51
Total direct expenses per acre	106.66
Return over direct expenses per acre	115.05
Overhead expenses per acre	
Custom hire	2.91
Hired labor	5.31
Machinery & bldg leases	0.57
RE & pers. property taxes	12.09
Farm insurance	3.86
Utilities	1.79
Dues & professional fees	1.61
Interest	52.12
Mach & bldg depreciation	5.46
Miscellaneous	2.18
Total overhead expenses per acre	87.91
Total listed expenses per acre	194.58
Net return per acre	27.13
Total direct expense per cwt	8.14
Total listed expense per cwt	14.84
Net return per cwt	2.07
Breakeven yield per acre	11.44
Lbr & mgt charge per acre	12.03
Net return over lbr & mgt	15.10

TABLE 11 - 10
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

PINTO BEANS ON CASH RENTED LAND

	Average For All Farms
Number of fields	25
Number of farms	17
Acres	122.41
Yield per acre (cwt)	11.27
Operators share of yield %	100.00
Value per cwt	17.14
Total product return per acre	193.12
Miscellaneous income per acre	28.00
Gross return per acre	221.12
Direct expenses per acre	
Seed	27.69
Fertilizer	12.50
Crop chemicals	24.73
Crop insurance	16.69
Fuel & oil	7.94
Repairs	15.01
Custom hire	4.63
Land rent	55.36
Operating interest	8.75
Miscellaneous	0.70
Total direct expenses per acre	174.02
Return over direct expenses per acre	47.10
Overhead expenses per acre	
Custom hire	3.67
Hired labor	7.19
Machinery & bldg leases	3.24
Farm insurance	3.02
Utilities	1.90
Dues & professional fees	0.99
Interest	4.11
Mach & bldg depreciation	7.75
Miscellaneous	3.92
Total overhead expenses per acre	35.78
Total listed expenses per acre	209.80
Net return per acre	11.32
Total direct expense per cwt	15.44
Total listed expense per cwt	18.62
Net return per cwt	1.00
Breakeven yield per acre	10.61
Lbr & mgt charge per acre	15.49
Net return over lbr & mgt	-4.17

TABLE 11 - 11
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

CORN ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	41	7	9
Number of farms	34	7	7
Acres	110.44	105.19	111.89
Yield per acre (bushel)	110.40	91.31	132.62
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.31	2.23	2.29
Total product return per acre	254.83	203.70	304.25
Miscellaneous income per acre	5.50	0.84	2.23
Gross return per acre	260.33	204.54	306.48
Direct expenses per acre			
Seed	28.37	26.02	29.58
Fertilizer	41.17	41.90	36.30
Crop chemicals	18.64	21.77	14.72
Crop insurance	8.68	4.83	7.13
Drying fuel	7.45	12.54	5.34
Fuel & oil	8.40	9.18	9.06
Repairs	17.81	20.32	12.14
Custom hire	4.54	7.11	1.48
Hired labor	0.38	0.04	1.31
Machinery & bldg leases	0.05	0.00	0.00
Utilities	0.09	0.00	0.52
Operating interest	7.86	13.94	3.37
Miscellaneous	0.42	2.03	0.00
Total direct expenses per acre	143.88	159.67	120.97
Return over direct expenses per acre	116.45	44.87	185.51
Overhead expenses per acre			
Custom hire	1.23	0.73	0.04
Hired labor	6.61	3.95	5.90
Machinery & bldg leases	2.29	2.50	1.71
RE & pers. property taxes	9.41	7.66	10.44
Farm insurance	2.67	2.43	2.31
Utilities	2.60	3.70	1.22
Dues & professional fees	1.91	1.51	0.97
Interest	40.72	27.79	31.10
Mach & bldg depreciation	12.75	14.31	17.67
Miscellaneous	2.55	2.50	1.43
Total overhead expenses per acre	82.74	67.08	72.78
Total listed expenses per acre	226.62	226.75	193.75
Net return per acre	33.70	-22.21	112.73
Total direct expense per bushel	1.30	1.75	0.91
Total listed expense per bushel	2.05	2.48	1.46
Net return per bushel	0.31	-0.24	0.85
Breakeven yield per acre	95.80	101.26	83.48
Net return including govt. payments	48.05	-6.75	128.41
Lbr & mgt charge per acre	16.20	24.99	14.93
Net return over lbr & mgt	31.85	-31.73	113.48

TABLE 11 - 12
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

CORN ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	88	16	15
Number of farms	59	12	12
Acres	157.72	82.67	226.66
Yield per acre (bushel)	122.00	69.60	135.30
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.34	2.27	2.44
Other product return per acre	0.13	0.00	0.00
Total product return per acre	285.69	158.29	330.56
Miscellaneous income per acre	2.68	5.21	3.81
Gross return per acre	288.37	163.50	334.37
Direct expenses per acre			
Seed	30.48	30.71	28.95
Fertilizer	43.49	35.44	38.92
Crop chemicals	20.51	24.10	15.81
Crop insurance	10.32	9.79	10.64
Drying fuel	6.18	1.30	4.97
Fuel & oil	9.70	12.16	9.19
Repairs	19.18	22.31	13.05
Custom hire	5.89	1.87	1.68
Hired labor	0.37	0.25	0.20
Land rent	62.96	49.22	61.78
Utilities	0.37	0.00	1.41
Operating interest	8.73	5.80	8.89
Miscellaneous	0.59	1.26	0.00
Total direct expenses per acre	218.71	193.55	195.50
Return over direct expenses per acre	69.66	-30.05	138.86
Overhead expenses per acre			
Custom hire	0.68	0.53	0.00
Hired labor	8.51	3.99	6.72
Machinery & bldg leases	3.16	3.83	4.06
Farm insurance	3.23	2.05	1.89
Utilities	2.34	2.29	2.00
Dues & professional fees	2.30	1.72	2.57
Interest	6.74	4.15	3.07
Mach & bldg depreciation	11.31	9.67	12.02
Miscellaneous	2.89	1.78	3.13
Total overhead expenses per acre	41.20	30.66	35.46
Total listed expenses per acre	259.91	224.20	230.97
Net return per acre	28.47	-60.70	103.40
Total direct expense per bushel	1.79	2.78	1.44
Total listed expense per bushel	2.13	3.22	1.71
Net return per bushel	0.23	-0.87	0.76
Breakeven yield per acre	109.84	96.30	92.98
Net return including govt. payments	40.34	-50.67	115.51
Lbr & mgt charge per acre	13.77	21.02	16.08
Net return over lbr & mgt	26.57	-71.69	99.43

TABLE 11 - 13
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

CORN ON SHARE RENTED LAND

	Average For All Farms
Number of fields	12
Number of farms	10
Acres	134.66
Yield per acre (bushel)	121.10
Operators share of yield %	65.91
Value per bushel	2.30
Total product return per acre	182.39
Miscellaneous income per acre	1.24
Gross return per acre	183.63
Direct expenses per acre	
Seed	28.86
Fertilizer	37.32
Crop chemicals	18.55
Crop insurance	6.09
Drying fuel	3.59
Fuel & oil	9.34
Repairs	14.13
Custom hire	3.82
Hired labor	0.12
Operating interest	3.96
Miscellaneous	0.52
Total direct expenses per acre	125.37
Return over direct expenses per acre	58.26
Overhead expenses per acre	
Custom hire	0.06
Hired labor	7.71
Machinery & bldg leases	3.37
Farm insurance	2.17
Utilities	1.70
Dues & professional fees	1.04
Interest	4.65
Mach & bldg depreciation	11.27
Miscellaneous	3.36
Total overhead expenses per acre	36.25
Total listed expenses per acre	161.62
Net return per acre	22.01
Total direct expense per bushel	1.57
Total listed expense per bushel	2.02
Net return per bushel	0.28
Breakeven yield per acre	105.81
Net return including govt. payments	31.09
Lbr & mgt charge per acre	17.64
Net return over lbr & mgt	13.45

TABLE 11 - 14
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

CORN SILAGE ON CASH RENTED LAND

	Average For All Farms
Number of fields	5
Number of farms	5
Acres	20.24
Yield per acre (ton)	14.46
Operators share of yield %	100.00
Value per ton	17.17
Total product return per acre	248.27
Miscellaneous income per acre	3.58
Gross return per acre	251.85
Direct expenses per acre	
Seed	28.14
Fertilizer	32.22
Crop chemicals	16.47
Crop insurance	4.80
Fuel & oil	10.45
Repairs	20.35
Custom hire	3.46
Hired labor	0.26
Land rent	48.96
Operating interest	6.16
Total direct expenses per acre	171.26
Return over direct expenses per acre	80.58
Overhead expenses per acre	
Hired labor	2.61
Machinery & bldg leases	5.60
Farm insurance	1.44
Utilities	2.01
Dues & professional fees	2.95
Interest	2.84
Mach & bldg depreciation	14.30
Miscellaneous	3.27
Total overhead expenses per acre	35.01
Total listed expenses per acre	206.28
Net return per acre	45.57
Total direct expense per ton	11.85
Total listed expense per ton	14.27
Net return per ton	3.15
Breakeven yield per acre	11.80
Net return including govt. payments	59.56
Lbr & mgt charge per acre	23.57
Net return over lbr & mgt	35.99

TABLE 11 - 15
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

ALFALFA HAY ON OWNED LAND

	Average For All Farms
Number of fields	14
Number of farms	13
Acres	37.56
Yield per acre (ton)	2.94
Operators share of yield %	100.00
Value per ton	67.06
Total product return per acre	196.88
Miscellaneous income per acre	0.00
Gross return per acre	196.88
Direct expenses per acre	
Seed	1.99
Fertilizer	11.97
Crop chemicals	3.51
Fuel & oil	8.85
Repairs	13.25
Custom hire	0.67
Hired labor	0.58
Operating interest	7.49
Total direct expenses per acre	48.30
Return over direct expenses per acre	148.58
Overhead expenses per acre	
Custom hire	0.04
Hired labor	3.23
Machinery & bldg leases	3.72
RE & pers. property taxes	9.61
Farm insurance	2.31
Utilities	1.59
Dues & professional fees	1.30
Interest	20.56
Mach & bldg depreciation	13.21
Miscellaneous	2.45
Total overhead expenses per acre	58.02
Total listed expenses per acre	106.32
Net return per acre	90.56
Total direct expense per ton	16.45
Total listed expense per ton	36.22
Net return per ton	30.85
Breakeven yield per acre	1.59
Net return including govt. payments	98.95
Lbr & mgt charge per acre	19.47
Net return over lbr & mgt	79.48

TABLE 11 - 16
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

ALFALFA HAY ON CASH RENTED LAND

	Average For All Farms
Number of fields	21
Number of farms	20
Acres	76.16
Yield per acre (ton)	2.76
Operators share of yield %	100.00
Value per ton	76.18
Total product return per acre	210.59
Miscellaneous income per acre	0.00
Gross return per acre	210.59
Direct expenses per acre	
Seed	14.48
Fertilizer	10.55
Crop chemicals	7.17
Crop insurance	0.16
Fuel & oil	9.94
Repairs	18.61
Custom hire	11.99
Hired labor	0.05
Land rent	52.04
Operating interest	5.06
Miscellaneous	2.48
Total direct expenses per acre	132.54
Return over direct expenses per acre	78.06
Overhead expenses per acre	
Custom hire	0.88
Hired labor	8.96
Machinery & bldg leases	2.26
Farm insurance	2.43
Utilities	2.16
Dues & professional fees	1.19
Interest	5.85
Mach & bldg depreciation	12.32
Miscellaneous	2.86
Total overhead expenses per acre	38.91
Total listed expenses per acre	171.44
Net return per acre	39.15
Total direct expense per ton	47.94
Total listed expense per ton	62.02
Net return per ton	14.16
Breakeven yield per acre	2.25
Net return including govt. payments	39.68
Lbr & mgt charge per acre	16.29
Net return over lbr & mgt	23.39

TABLE 11 - 17
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

POTATOES ON CASH RENTED LAND

	Average For All Farms
Number of fields	15
Number of farms	8
Acres	132.57
Yield per acre (cwt)	152.16
Operators share of yield %	100.00
Value per cwt	5.06
Total product return per acre	769.26
Miscellaneous income per acre	53.52
Gross return per acre	822.79
Direct expenses per acre	
Seed	83.42
Fertilizer	51.12
Crop chemicals	115.59
Crop insurance	24.86
Fuel & oil	46.26
Repairs	83.26
Custom hire	18.55
Hired labor	9.38
Land rent	61.13
Marketing	2.69
Operating interest	29.49
Miscellaneous	1.56
Total direct expenses per acre	527.31
Return over direct expenses per acre	295.48
Overhead expenses per acre	
Custom hire	12.62
Hired labor	91.78
Machinery & bldg leases	38.33
Farm insurance	7.73
Utilities	14.31
Dues & professional fees	10.38
Interest	33.89
Mach & bldg depreciation	47.39
Miscellaneous	13.02
Total overhead expenses per acre	269.45
Total listed expenses per acre	796.76
Net return per acre	26.03
Total direct expense per cwt	3.47
Total listed expense per cwt	5.24
Net return per cwt	0.17
Breakeven yield per acre	147.02
Lbr & mgt charge per acre	58.37
Net return over lbr & mgt	-32.34

TABLE 11 - 18
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SOYBEANS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	112	23	19
Number of farms	83	17	17
Acres	105.79	102.46	94.44
Yield per acre (bushel)	33.62	25.10	40.40
Operators share of yield %	100.00	100.00	100.00
Value per bushel	6.41	6.26	6.43
Total product return per acre	215.67	157.18	259.63
Miscellaneous income per acre	4.39	11.71	1.32
Gross return per acre	220.05	168.89	260.96
Direct expenses per acre			
Seed	16.44	16.38	14.86
Fertilizer	6.59	6.94	1.71
Crop chemicals	27.25	29.69	23.89
Crop insurance	9.25	9.45	9.17
Fuel & oil	8.75	10.47	7.79
Repairs	16.19	18.05	13.87
Custom hire	3.10	1.45	3.40
Hired labor	0.41	0.33	0.25
Machinery & bldg leases	0.33	0.11	0.00
Utilities	0.02	0.12	0.00
Operating interest	4.93	8.97	2.89
Miscellaneous	0.15	0.11	0.02
Total direct expenses per acre	93.42	102.08	77.86
Return over direct expenses per acre	126.64	66.81	183.10
Overhead expenses per acre			
Custom hire	0.78	2.68	0.50
Hired labor	6.51	3.96	6.02
Machinery & bldg leases	2.16	2.74	3.33
RE & pers. property taxes	11.47	11.51	13.95
Farm insurance	2.74	3.56	2.13
Utilities	2.35	2.79	2.25
Dues & professional fees	1.20	1.78	0.59
Interest	36.74	45.36	34.32
Mach & bldg depreciation	11.97	10.84	12.16
Miscellaneous	3.60	3.41	3.22
Total overhead expenses per acre	79.53	88.63	78.46
Total listed expenses per acre	172.95	190.72	156.32
Net return per acre	47.11	-21.82	104.64
Total direct expense per bushel	2.78	4.07	1.93
Total listed expense per bushel	5.14	7.60	3.87
Net return per bushel	1.40	-0.87	2.59
Breakeven yield per acre	26.28	28.59	24.12
Net return including govt. payments	57.92	-10.43	116.17
Lbr & mgt charge per acre	16.59	18.37	16.87
Net return over lbr & mgt	41.32	-28.80	99.30

TABLE 11 - 19
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SOYBEANS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	270	43	45
Number of farms	159	32	32
Acres	191.95	221.83	204.25
Yield per acre (bushel)	33.47	25.53	40.25
Operators share of yield %	100.00	100.00	100.00
Value per bushel	6.35	6.27	6.45
Total product return per acre	212.66	160.03	259.49
Miscellaneous income per acre	7.43	6.57	8.36
Gross return per acre	220.09	166.60	267.85
Direct expenses per acre			
Seed	16.08	16.02	15.40
Fertilizer	6.59	8.42	2.83
Crop chemicals	28.21	26.76	26.24
Crop insurance	9.24	9.99	9.70
Fuel & oil	8.13	8.90	7.80
Repairs	13.97	14.37	13.61
Custom hire	2.87	3.09	1.82
Hired labor	0.23	0.00	0.25
Land rent	60.79	62.66	56.95
Machinery & bldg leases	0.74	1.57	0.03
Utilities	0.04	0.21	0.00
Operating interest	5.78	6.95	4.92
Miscellaneous	0.23	0.08	0.34
Total direct expenses per acre	152.63	157.62	139.88
Return over direct expenses per acre	67.46	8.97	127.97
Overhead expenses per acre			
Custom hire	1.11	2.22	1.54
Hired labor	6.22	5.77	6.63
Machinery & bldg leases	2.44	2.65	3.99
Farm insurance	2.81	3.06	2.32
Utilities	2.16	2.19	2.66
Dues & professional fees	1.49	1.97	1.27
Interest	6.03	4.40	7.69
Mach & bldg depreciation	10.12	8.96	11.36
Miscellaneous	2.67	2.25	2.93
Total overhead expenses per acre	35.32	34.87	40.41
Total listed expenses per acre	187.95	192.49	180.29
Net return per acre	32.14	-25.90	87.56
Total direct expense per bushel	4.56	6.17	3.48
Total listed expense per bushel	5.62	7.54	4.48
Net return per bushel	0.96	-1.01	2.18
Breakeven yield per acre	28.41	29.67	26.67
Net return including govt. payments	43.19	-12.67	99.23
Lbr & mgt charge per acre	15.48	15.39	17.06
Net return over lbr & mgt	27.70	-28.06	82.17

TABLE 11 - 20
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SOYBEANS ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	71	10	12
Number of farms	38	8	8
Acres	120.67	117.45	139.64
Yield per acre (bushel)	33.16	26.27	39.70
Operators share of yield %	62.54	62.68	63.35
Value per bushel	6.44	6.40	6.53
Total product return per acre	133.31	106.00	163.75
Miscellaneous income per acre	2.05	0.00	0.00
Gross return per acre	135.36	106.00	163.75
Direct expenses per acre			
Seed	12.08	14.76	12.35
Fertilizer	1.09	3.08	0.42
Crop chemicals	22.74	25.33	23.86
Crop insurance	6.40	6.34	9.08
Fuel & oil	8.48	9.06	6.82
Repairs	17.74	21.13	12.61
Custom hire	1.85	0.58	3.88
Hired labor	0.01	0.00	0.00
Machinery & bldg leases	0.25	0.00	0.00
Operating interest	4.01	5.55	3.41
Miscellaneous	0.16	0.00	0.00
Total direct expenses per acre	74.80	85.82	72.44
Return over direct expenses per acre	60.56	20.18	91.31
Overhead expenses per acre			
Custom hire	0.28	0.40	0.00
Hired labor	7.54	6.70	10.00
Machinery & bldg leases	2.78	0.87	5.24
Farm insurance	2.65	3.81	2.58
Utilities	2.38	3.40	1.71
Dues & professional fees	1.00	1.04	2.11
Interest	3.78	5.66	2.85
Mach & bldg depreciation	14.01	17.21	12.28
Miscellaneous	3.96	3.48	1.39
Total overhead expenses per acre	38.38	42.57	38.17
Total listed expenses per acre	113.18	128.38	110.61
Net return per acre	22.19	-22.38	53.14
Total direct expense per bushel	3.61	5.21	2.88
Total listed expense per bushel	5.46	7.80	4.40
Net return per bushel	1.07	-1.36	2.11
Breakeven yield per acre	27.58	32.02	26.75
Net return including govt. payments	29.38	-15.25	62.41
Lbr & mgt charge per acre	16.18	16.94	15.34
Net return over lbr & mgt	13.21	-32.19	47.07

TABLE 11 - 21
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SUGAR BEETS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	69	13	12
Number of farms	56	11	11
Acres	94.24	79.21	126.87
Yield per acre (ton)	18.36	14.02	21.46
Operators share of yield %	100.00	100.00	100.00
Value per ton	40.15	38.61	41.48
Total product return per acre	737.13	541.23	890.39
Miscellaneous income per acre	10.47	37.32	3.19
Gross return per acre	747.61	578.55	893.58
Direct expenses per acre			
Seed	38.69	40.80	36.33
Fertilizer	34.55	33.69	31.80
Crop chemicals	89.19	88.75	92.80
Crop insurance	12.35	13.61	11.00
Fuel & oil	26.98	28.74	26.83
Repairs	56.88	61.54	55.65
Custom hire	11.90	11.95	3.68
Hired labor	24.30	26.33	26.16
Machinery & bldg leases	0.73	2.49	1.45
Sugar beet stock	61.88	91.53	51.53
Operating interest	17.31	28.04	13.18
Miscellaneous	3.64	1.54	3.84
Total direct expenses per acre	378.41	429.01	354.26
Return over direct expenses per acre	369.20	149.54	539.31
Overhead expenses per acre			
Custom hire	3.46	6.35	4.08
Hired labor	30.38	18.26	36.63
Machinery & bldg leases	8.99	8.65	10.40
RE & pers. property taxes	15.63	11.46	17.42
Farm insurance	5.72	5.41	6.56
Utilities	7.45	8.89	7.33
Dues & professional fees	3.55	5.41	2.32
Interest	56.17	84.75	45.58
Mach & bldg depreciation	45.47	31.19	59.53
Miscellaneous	8.72	9.78	9.09
Total overhead expenses per acre	185.56	190.16	198.94
Total listed expenses per acre	563.97	619.17	553.20
Net return per acre	183.64	-40.62	340.38
Total direct expense per ton	20.61	30.60	16.50
Total listed expense per ton	30.72	44.17	25.77
Net return per ton	10.00	-2.90	15.86
Breakeven yield per acre	13.79	15.07	13.26
Lbr & mgt charge per acre	59.15	54.19	55.42
Net return over lbr & mgt	124.48	-94.81	284.96

TABLE 11 - 22
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SUGAR BEETS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	143	23	30
Number of farms	97	19	19
Acres	189.47	175.32	168.51
Yield per acre (ton)	17.78	14.80	20.98
Operators share of yield %	100.00	100.00	100.00
Value per ton	39.93	38.87	41.29
Total product return per acre	709.83	575.15	866.17
Miscellaneous income per acre	16.84	28.93	10.78
Gross return per acre	726.67	604.08	876.95
Direct expenses per acre			
Seed	40.94	41.41	45.40
Fertilizer	34.30	35.76	34.27
Crop chemicals	93.20	97.58	91.41
Crop insurance	12.59	15.43	10.92
Fuel & oil	27.90	25.01	32.24
Repairs	58.81	50.09	55.19
Custom hire	13.71	15.22	7.01
Hired labor	24.11	26.00	21.67
Land rent	75.20	85.71	60.61
Machinery & bldg leases	0.78	1.52	3.39
Sugar beet stock	67.83	97.00	27.97
Operating interest	19.68	23.32	13.68
Miscellaneous	7.45	9.35	5.82
Total direct expenses per acre	475.72	523.39	404.12
Return over direct expenses per acre	250.96	80.69	472.83
Overhead expenses per acre			
Custom hire	4.50	7.38	1.80
Hired labor	35.48	25.27	38.12
Machinery & bldg leases	11.13	7.18	12.60
Farm insurance	5.48	5.25	7.12
Utilities	7.02	6.42	7.95
Dues & professional fees	3.79	4.01	3.63
Interest	25.35	23.63	34.67
Mach & bldg depreciation	40.11	32.68	41.88
Miscellaneous	11.67	11.42	9.02
Total overhead expenses per acre	145.31	123.23	162.24
Total listed expenses per acre	621.03	646.62	566.36
Net return per acre	105.64	-42.54	310.59
Total direct expense per ton	26.76	35.37	19.27
Total listed expense per ton	34.94	43.70	27.00
Net return per ton	5.94	-2.88	14.81
Breakeven yield per acre	15.13	15.89	13.45
Lbr & mgt charge per acre	54.02	53.21	56.48
Net return over lbr & mgt	51.62	-95.75	254.11

TABLE 11 - 23
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

SUGAR BEETS ON SHARE RENTED LAND

	Average For All Farms
Number of fields	9
Number of farms	7
Acres	108.96
Yield per acre (ton)	19.02
Operators share of yield %	74.33
Value per ton	42.02
Total product return per acre	587.46
Miscellaneous income per acre	1.39
Gross return per acre	588.85
Direct expenses per acre	
Seed	39.35
Fertilizer	39.26
Crop chemicals	101.81
Crop insurance	10.81
Fuel & oil	23.65
Repairs	51.57
Custom hire	4.23
Hired labor	19.49
Sugar beet stock	19.03
Operating interest	24.90
Miscellaneous	6.83
Total direct expenses per acre	340.92
Return over direct expenses per acre	247.93
Overhead expenses per acre	
Custom hire	27.13
Hired labor	30.93
Machinery & bldg leases	26.11
Farm insurance	2.78
Utilities	8.30
Dues & professional fees	6.17
Interest	17.66
Mach & bldg depreciation	29.75
Miscellaneous	17.95
Total overhead expenses per acre	166.78
Total listed expenses per acre	507.71
Net return per acre	81.15
Total direct expense per ton	24.11
Total listed expense per ton	35.91
Net return per ton	5.74
Breakeven yield per acre	16.21
Lbr & mgt charge per acre	51.39
Net return over lbr & mgt	29.75

TABLE 11 - 24
Crop Enterprise Analysis, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

SUNFLOWERS ON CASH RENTED LAND

	Average For All Farms
Number of fields	15
Number of farms	13
Acres	127.97
Yield per acre (cwt)	14.70
Operators share of yield %	100.00
Value per cwt	11.11
Total product return per acre	163.26
Miscellaneous income per acre	15.66
Gross return per acre	178.91
Direct expenses per acre	
Seed	14.90
Fertilizer	19.88
Crop chemicals	14.39
Crop insurance	9.54
Drying fuel	0.04
Fuel & oil	8.36
Repairs	15.71
Custom hire	5.19
Hired labor	0.09
Land rent	57.59
Operating interest	5.38
Miscellaneous	0.51
Total direct expenses per acre	151.60
Return over direct expenses per acre	27.32
Overhead expenses per acre	
Custom hire	0.04
Hired labor	8.11
Machinery & bldg leases	2.24
Farm insurance	1.88
Utilities	1.88
Dues & professional fees	1.18
Interest	1.78
Mach & bldg depreciation	8.30
Miscellaneous	4.39
Total overhead expenses per acre	29.82
Total listed expenses per acre	181.42
Net return per acre	-2.50
Total direct expense per cwt	10.31
Total listed expense per cwt	12.34
Net return per cwt	-0.17
Breakeven yield per acre	14.92
Net return including govt. payments	7.46
Lbr & mgt charge per acre	17.74
Net return over lbr & mgt	-10.28

TABLE 12 - 1
Size Of Farm Report, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Gross Cash Farm Income)

	Average For All Farms	40,001 - 100,000	100,001 - 200,000	200,001 - 500,000	500,001 +
Number of farms	230	13	35	122	56
Income Statement					
Gross cash farm income	384492	74920	145505	320486	770224
Total cash farm expense	318457	69989	128678	266882	627119
Net cash farm income	66034	4931	16827	53604	143105
Inventory change	-15532	5372	-103	-15183	-32195
Depreciation and capital adjustment	-13312	-4083	-5473	-10866	-26639
Net farm income	37189	6220	11251	27555	84271
Profitability (cost)					
Labor and management earnings	12494	1169	3141	4531	39290
Rate of return on assets	5 %	-1 %	1 %	4 %	6 %
Rate of return on equity	2 %	-8 %	-7 %	1 %	5 %
Operating profit margin	11 %	-1 %	2 %	10 %	13 %
Asset turnover rate	45 %	50 %	47 %	41 %	49 %
Liquidity					
Term debt coverage ratio	74 %	53 %	55 %	57 %	97 %
Expense as a percent of income	86 %	88 %	89 %	88 %	85 %
Interest as a percent of income	8 %	7 %	9 %	9 %	7 %
Solvency (cost)					
Number of sole proprietors	203	12	35	113	39
Ending farm assets	755868	187570	322161	734759	1440830
Ending farm liabilities	395647	106458	195344	374450	749116
Ending total assets	869001	236264	373283	850720	1628811
Ending total liabilities	412800	120883	207707	392578	769805
Ending net worth	456201	115382	165575	458142	859006
Net worth change	8741	-4080	288	1703	40787
Ending farm debt to asset ratio	52 %	57 %	61 %	51 %	52 %
Beg total debt to asset ratio	46 %	40 %	54 %	44 %	46 %
End total debt to asset ratio	48 %	51 %	56 %	46 %	47 %
Nonfarm Information					
Farms reporting living expenses	26	2	5	17	2
Total family living expense	29832	-	21336	30517	-
Total living, invest, & capital purch	45896	-	33947	45159	-
Net nonfarm income	13124	19971	15828	13138	9071
Crop Acres					
Total acres owned	337	92	180	339	500
Total crop acres	1407	428	736	1287	2398
Total crop acres owned	286	17	139	308	407
Total crop acres cash rented	1015	302	535	858	1888
Total crop acres share rented	105	108	62	122	103

TABLE 12 - 2
Type Of Farm Report, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley

	Average For All Farms	Crop	Other
Number of farms	230	204	19
Income Statement			
Gross cash farm income	384492	394230	279384
Total cash farm expense	318457	326208	234618
Net cash farm income	66034	68022	44766
Inventory change	-15532	-14854	-33179
Depreciation and capital adjustment	-13312	-12583	-22105
Net farm income	37189	40585	-10519
Profitability (cost)			
Labor and management earnings	12494	15626	-31818
Rate of return on assets	5 %	5 %	0 %
Rate of return on equity	2 %	3 %	-10 %
Operating profit margin	11 %	11 %	0 %
Asset turnover rate	45 %	46 %	33 %
Liquidity			
Term debt coverage ratio	74 %	76 %	31 %
Expense as a percent of income	86 %	86 %	95 %
Interest as a percent of income	8 %	8 %	14 %
Solvency (cost)			
Number of sole proprietors	203	178	18
Ending farm assets	755868	751259	692177
Ending farm liabilities	395647	389438	385430
Ending total assets	869001	871784	754467
Ending total liabilities	412800	407389	398770
Ending net worth	456201	464395	355697
Net worth change	8741	11516	-31789
Ending farm debt to asset ratio	52 %	52 %	56 %
Beg total debt to asset ratio	46 %	45 %	49 %
End total debt to asset ratio	48 %	47 %	53 %
Nonfarm Information			
Farms reporting living expenses	26	22	4
Total family living expense	29832	28970	-
Total living, invest, & capital purch	45896	46090	-
Net nonfarm income	13124	12973	15841
Crop Acres			
Total acres owned	337	321	449
Total crop acres	1407	1434	1190
Total crop acres owned	286	283	258
Total crop acres cash rented	1015	1042	849
Total crop acres share rented	105	109	83

TABLE 12 - 3
Age Of Operator Report, 1997
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley

	Average For All Farms	Under 31	31 - 40	41 - 50	51 - 60
Number of farms	229	22	74	99	31
Income Statement					
Gross cash farm income	385730	231505	366482	399887	418122
Total cash farm expense	319553	196291	302221	334459	334686
Net cash farm income	66177	35214	64261	65428	83436
Inventory change	-15605	-1141	-15077	-10730	-34059
Depreciation and capital adjustment	-13410	-12349	-11650	-16731	-6851
Net farm income	37162	21724	37534	37967	42526
Profitability (cost)					
Labor and management earnings	12398	10536	18844	11045	2011
Rate of return on assets	5 %	4 %	5 %	5 %	4 %
Rate of return on equity	2 %	0 %	3 %	2 %	2 %
Operating profit margin	11 %	8 %	9 %	12 %	13 %
Asset turnover rate	45 %	56 %	54 %	43 %	32 %
Liquidity					
Term debt coverage ratio	74 %	103 %	83 %	77 %	53 %
Expense as a percent of income	86 %	86 %	86 %	86 %	87 %
Interest as a percent of income	8 %	8 %	7 %	9 %	10 %
Solvency (cost)					
Number of sole proprietors	202	19	66	89	26
Ending farm assets	758211	317385	651383	858349	1016819
Ending farm liabilities	397047	173677	350190	453977	509630
Ending total assets	871883	345533	747925	991620	1130294
Ending total liabilities	414285	188273	367943	474201	518595
Ending net worth	457598	157260	379982	517418	611700
Net worth change	8634	4066	10649	8712	-2053
Ending farm debt to asset ratio	52 %	55 %	54 %	53 %	50 %
Beg total debt to asset ratio	46 %	48 %	47 %	46 %	45 %
End total debt to asset ratio	48 %	54 %	49 %	48 %	46 %
Nonfarm Information					
Farms reporting living expenses	26	3	11	11	1
Total family living expense	29832	-	31218	32159	-
Total living, invest, & capital purch	45896	-	49530	47743	-
Net nonfarm income	13163	9478	13686	13313	14614
Crop Acres					
Total acres owned	337	110	209	404	593
Total crop acres	1411	829	1396	1499	1419
Total crop acres owned	286	45	183	347	523
Total crop acres cash rented	1019	742	1070	1064	789
Total crop acres share rented	106	43	144	88	107

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