2015 ANNUAL REPORT South Central North Dakota

North Dakota Farm and Ranch Business Management Education www.ndfarmmanagement.com



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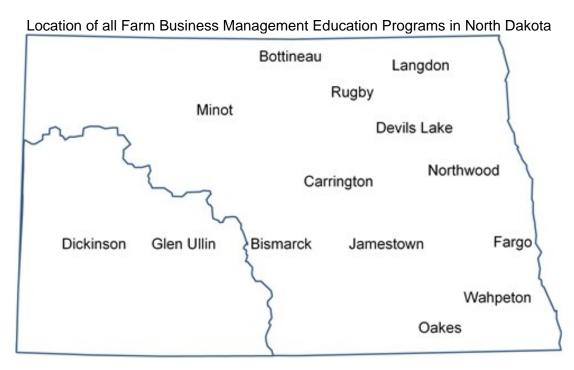
NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

REGION 3 – SOUTH CENTRAL AVERAGES 2015 ANNUAL REPORT

The South Central (Region 3) farm business analyses were submitted by the following instructors represented by their cooperating schools.

| School | <u>Instructor</u> |
|--|--------------------------------|
| Bismarck State College Carrington High School | |
| Fargo (NDSCS) | Jory Hansen . Ron Smithberg |
| Jamestown (JVCTC) Oakes (JVCTC) Wahpeton (NDSCS) | . Lance Brower |
| • • • | • |

This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2015 closed out on a timely basis. The farm management instructors cited above generated the Finpack year-end farm analyses. Andrew Swenson, NDSU Extension Service, databased the Finpack analyses of farms and generated the comparative tables for this report.



2015 South Central Report North Dakota Farm Business Management Education

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INTRODUCTION

This report summarizes the individual farm records of the specific region or the whole state as identified on the acknowledgement page. The current financial status of farm operators and net returns from each crop and livestock enterprise is reported. In addition to the average of all farms, the averages for the high, middle, and low-income groups are also presented. All participating farm/ranch families are provided a copy of the regional averages report. They can compare their own Finan business analysis to the regional and/or state averages report 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 regional and state averages reports are divided into three major sections; farm operators' reports, crop reports and livestock reports. Explanatory notes precede each section. The first section contains 15 tables with whole farm financial and operator information. The last three tables of this section are financial summaries in which farms are categorized by gross revenue, age of operator and farm type, respectively. The second section provides performance information on crop enterprises. The third section provides performance results on livestock enterprises. Lastly, figures 1 through 10 provide trend information for various measures of finance and/or production.

The 2015 summary reports are based upon data generated by the Finan individual farm analysis completed by farm/ranch families enrolled in the statewide Adult Farm and Ranch Business Management Education program in North Dakota. Instructors pooled the individual business analysis and submitted the combined school data to the FINPACK Center located at North Dakota State University. The FINPACK Center did provide schools with local averages in order to assist instructors with obtaining relevant local management trends.

Farm/ranch families enrolled in the statewide program are encouraged to request assistance from their instructors to determine short-term cash flow and long-term projections. Each instructor has access to FINPACK computer programs, which can be used to generate annual or multi-year (cash flow) farm plans and/or long term alternative projections.

This is the 27th year that the regional averages have been generated in North Dakota based upon the four regions shown in the state map on the cover of this publication. A regional report has been generated and published for Regions 2 – North Central, 3 – South Central and 4 - Western identified on the North Dakota map. Farms in Region 1 – Red River Valley are located within the Red River Valley. Those farms are contained in a combined Minnesota-North Dakota Red River Valley report. The state averages report includes all farms participating in the North Dakota Farm Business Management Education Program that were represented in the regional averages and also those farms which were processed and submitted after the March deadline date. All of these reports may be ordered from Farm Business Management, P.O. Box 6022, Bismarck, ND, 58506-6022 for \$5 per copy. The reports are available online at www.ndfarmmanagement.com.

EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS

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

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

Farm Income Statement

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

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

The second section of the income statement lists <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 Expense" is the "Net Cash Farm Income." This is net farm income on a cash basis.

The last two sections of the income statement deal with the non-cash changes in the farm business. The "Inventory Changes" and "Depreciation" sections are used to convert the cash income statement (Net Cash Farm Income) derived from the first two sections into an accrual income statement. The final adjustment is for "Gain or loss on capital sales." The bottom line, labeled "Net farm Income," represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). In other words, it represents the return to all of the resources that are owned by the farm family and hence, not purchased or paid a wage. However, it does not include any debt forgiveness or asset repossessions.

Inventory Changes

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

Depreciation

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

Profitability Measures

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

- "Rate of return on assets" is the "Return on farm assets" divided by "Average farm assets."
- "Rate of return on equity "is the "Return of farm equity" divided by "Average farm equity."
- "Operating profit margin" is the "Return on farm assets" divided by "Value of farm production."
- "Asset turnover rate" is the "Value of farm production" divided by "Average farm assets."
- "Farm interest expense" is the accrual interest cost, usually it will be different from the cash interest expense.
- "Value of operator's labor and management" is an opportunity cost for unpaid operator's labor and management that is used in the calculation of several financial performance measures. A value of \$20,000 per full time operator plus 5% of value of farm production is used.
- "Return of farm assets" is calculated by adding "Farm interest expense" to "Net farm income" and then subtracting the "Value of operator's labor and management."
- "Average farm assets" is the average of beginning and ending total farm assets.
- "Return on farm equity" is calculated by subtracting the "Value of operator's labor and management" from "Net farm income."
- "Average farm equity" is the average of beginning and ending farm net worth.
- "Value of farm production" is gross cash farm income minus purchased feed and feeder livestock and adjusted for inventory changes in crops, market livestock, accounts receivable and breeding livestock.

Liquidity & Repayment Capacity Measures

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

Balance Sheets

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

Statement of Cash Flows

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

Financial Standards Measures

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

Liquidity

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

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

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

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

Solvency

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

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

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

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

Profitability

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

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

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

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

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

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

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

Repayment Capacity

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

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

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

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

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

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

Efficiency

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

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

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

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

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

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

Crop Production and Marketing Summary

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

Household and Personal Expenses

For those farms that keep records, the household and personal expenses are summarized. The farms are grouped in the same ranking as in the Income Statement. Since not all farms keep these records, the number of farms in the low profit and high profit groups may be different. Averages are determined by the number of farms keeping these records. The Statement of Cash Flows presents calculated family living and includes all farms. Income tax paid is also shown in the Statement of Cash Flows and includes all farms.

Operator and Labor Information

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

Nonfarm Summary

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

Farm Income Statement

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of | | | |
|---|--------------|--------------|-----------------|------------------|
| | All Farms | Low 20% | <u>40 - 60%</u> | <u> High 20%</u> |
| Number of farms | 140 | 28 | 28 | 28 |
| Cash Farm Income | | | | |
| Barley | 38,736 | 15,379 | 7,023 | 132,046 |
| Beans, Black Turtle | 5,662 | 5,060 | - | 20,531 |
| Beans, Navy | 992 | 1,520 | 856 | 1,280 |
| Beans, Pinto | 16,899 | 36,468 | 3,556 | 14,223 |
| Buckwheat | 232 | - | - | - |
| Canola | 4,667 | 8,576 | 1,171 | 9,572 |
| Corn | 158,535 | 288,565 | 117,583 | 275,551 |
| Flax | 2,119 | - | 2,979 | 1,684 |
| Hay, Alfalfa | 2,288 | 107 | 14 | 8,506 |
| Hay, Grass | 192 | 321 | - | 590 |
| Hay, Mixed Alfalfa/Grass | 367 | - | 268 | 1,196 |
| Oats | 111 | 24 | 8 | - |
| Peas, Field | 1,947 | - | 8,756 | 872 |
| Rye | 230 | - | 1,149 | - |
| Soybeans | 198,134 | 377,969 | 114,111 | 282,044 |
| Straw | 243 | - | 431 | 480 |
| Sunflowers | 11,047 | 12,295 | 4,850 | 27,993 |
| Sunflowers, Confectionary | 5,735 | - | - | 19,318 |
| Wheat, Durum | 2,468 | - | 3,023 | 9,316 |
| Wheat, Spring | 104,286 | 134,436 | 90,016 | 187,465 |
| Wheat, Winter | 1,736 | 126 | 6,044 | 400 |
| Rented Out | 3,059 | 1,617 | - | 11,342 |
| Soybeans, Food | 3,137 | 3,238 | - | - |
| Miscellaneous crop income | 108 | - | 9 | 438 |
| Beef Bulls | 335 | - | - | 1,676 |
| Beef Cow-Calf, Beef Calves | 38,809 | 12,060 | 39,703 | 26,604 |
| Beef Replacement Heifers | 9,364 | 13,028 | 68 | 31,045 |
| Beef Backgrounding | 39,745 | 37,095 | 20,121 | 85,194 |
| Beef Finishing | 22,798 | 33,004 | - | 80,627 |
| Beef Stockers | 2,252 | 9,145 | - | 11 021 |
| Dairy, Milk | 26,593 | 117,554 | - | 11,831 |
| Dairy, Dairy Calves Dairy Replacement Heifers | 2,396 101 | 3,903 | - | - |
| Sheep, Market Lamb Prod, Mkt Lambs | 126 | 631 | - | - |
| Beef Finish Cull Cows | 2,534 | 804 | <u>-</u> | 1,139 |
| Cull breeding livestock | 13,737 | 17,918 | 12,696 | 18,519 |
| Misc. livestock income | 4,392 | 2,233 | 12,090 | 18,553 |
| Crop government payments | 18,942 | 28,260 | 11,245 | 34,686 |
| CRP payments | 1,428 | 709 | 2,413 | 1,346 |
| Other government payments | 7,278 | 10,139 | 8,692 | 9,681 |
| Custom work income | 11,623 | 19,188 | 1,137 | 19,435 |
| Patronage dividends, cash | 6,355 | 7,940 | 3,704 | 14,147 |
| Crop insurance income | 34,337 | 30,067 | 12,031 | 99,665 |
| Property insurance income | 2,817 | 3,410 | 136 | 6,298 |
| Sale of resale items | 575 | 2,877 | - | - |
| Livestock insurance inc | 155 | 26 | 18 | - |
| Other farm income | 13,672 | 8,749 | 11,764 | 34,397 |
| Gross Cash Farm Income | 823,293 | 1,244,439 | 485,575 | 1,499,691 |
| | * | • | • | • |

Farm Income Statement (continued) North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | Low 20% | 40 - 60% | High 20% |
|------------------------------------|----------------------|-----------------|-------------------|-----------------|
| Number of farms | 140 | 28 | 28 | 28 |
| Cash Farm Expense | | | | |
| Seed | 91,871 | 144,160 | 65,600 | 161,526 |
| Fertilizer | 92,083 | 112,732 | 71,823 | 174,044 |
| Crop chemicals | 60,653 | 91,464 | 48,843 | 104,980 |
| Crop insurance | 28,949 | 48,949 | 15,727 | 49,964 |
| Drying expense | 1,179 | 2,882 | 372 | 1,744 |
| Storage | 958 | 240 | 652 | 3,499 |
| Irrigation energy | 414 | 493 | 367 | 802 |
| Crop marketing | 666 | 1,581 | 773 | 344 |
| Crop miscellaneous Consultants | 2,956 2,022 | 4,576 4,070 | 877 351 | 8,765 4,862 |
| Feeder livestock purchase | 32,479 | 80,137 | 308 | 63,637 |
| Purchased feed | 20,930 | 51,519 | 5,328 | 18,316 |
| Breeding fees | 582 | 1,993 | 2 | 416 |
| Veterinary | 4,111 | 5,678 | 2,714 | 4,682 |
| Supplies | 3,963 | 12,532 | 568 | 3,960 |
| Livestock custom hire | 541 | 1,579 | = | 1,079 |
| Hauling and trucking | 936 | 4,682 | _ | -, |
| Livestock marketing | 1,302 | 2,172 | 513 | 2,286 |
| Interest | 34,594 | 74,126 | 14,196 | 48,868 |
| CCC buyback | 5,585 | ,.== | - 1,100 | 27,925 |
| Fuel & oil | 30,972 | 50,370 | 18,085 | 47,021 |
| Repairs | 49,830 | 88,861 | 28,677 | 74,364 |
| Custom hire | 17,202 | 20,288 | 16,160 | 29,829 |
| Hired labor | 29,785 | 77,491 | 14,622 | 40,936 |
| Land rent | 98,838 | 149,589 | 60,370 | 185,459 |
| Machinery leases | 7,601 | 15,375 | 4,575 | 9,868 |
| Building leases | 411 | 40 | 495 | 1,378 |
| Real estate taxes | 5,270 | 8,043 | 3,016 | 7,698 |
| Farm insurance | 12,228 | 21,456 | 5,403 | 19,994 |
| Utilities | 10,050 | 17,881 | 7,139 | 12,434 |
| Dues & professional fees | 2,928 | 4,724 | 1,273 | 5,836 |
| Purchase of resale items | 286 | 1,432 | - | - |
| Miscellaneous | 12,415 | 16,521 | 9,186 | 20,091 |
| Total cash expense | 664,589 | 1,117,638 | 398,016 | 1,136,608 |
| Net cash farm income | 158,704 | 126,801 | 87,560 | 363,083 |
| Inventory Changes | | | | |
| Prepaids and supplies | -9,345 | -67,627 | 15,851 | 18,331 |
| Accounts receivable | -9,154 4,774 | -12,253 | -18,124 | -27,446 |
| Hedging accounts | 1,771 | -2,465 | 1,385 | 6,903 |
| Other current assets | 211 -10,707 | -116 -77,675 | -1,045 -13,615 | 2,194 72,946 |
| Crops and feed Market livestock | -15,389 | | -8,490 | -25,730 |
| Breeding livestock | -8,930 | 4,736 -7,055 | -7,976 | -19,381 |
| Other assets | -3,147 | -7,055 -752 | 1,428 | -18,635 |
| Accounts payable | -2,137 | -8,929 | -4,245 | 4,384 |
| Accrued interest | -1,478 | -5,599 | -821 | 2,057 |
| Total inventory change | -58,304 | -177,736 | -35,650 | 15.624 |
| Net operating profit | 100,400 | -50,935 | 51,909 | 378,707 |
| Depreciation | | | | |
| Machinery and equipment | -67,316 | -110.631 | -32,218 | -123,348 |
| Titled vehicles | -3,985 | -6,716 | -1,775 | -6,513 |
| Buildings and improvements | -7,910 | -14,217 | -2,691 | -16,127 |
| Total depreciation | -79,211 | -131,564 | -36,684 | -145,988 |
| Net farm income from operations | 21,189 | -182,499 | 15,225 | 232,719 |
| Gain or loss on capital sales | -996 | -3,176 | 2,628 | -8,803 |
| · | | • | • | · |
| Net farm income | 20,193 | -185,675 | 17,853 | 223,916 |

Inventory Changes North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of | | 40000/ | W 1 000/ |
|--|-----------|----------|-----------------|-----------|
| | AII Farms | Low 20% | <u>40 - 60%</u> | High 20% |
| Number of farms | 140 | 28 | 28 | 28 |
| Net cash farm income | 158,704 | 126,801 | 87,560 | 363,083 |
| Crops and Feed Ending inventory Beginning inventory Inventory change | 517,872 | 706,396 | 283,363 | 1,186,919 |
| | 528,579 | 784,071 | 296,977 | 1,113,973 |
| | -10,707 | -77,675 | -13,615 | 72,946 |
| Market Livestock Ending inventory Beginning inventory Inventory change | 87,441 | 97,027 | 41,109 | 171,209 |
| | 102,830 | 92,291 | 49,599 | 196,940 |
| | -15,389 | 4,736 | -8,490 | -25,730 |
| Accts Receivable Ending inventory Beginning inventory Inventory change | 31,058 | 41,056 | 34,510 | 48,457 |
| | 40,212 | 53,309 | 52,634 | 75,903 |
| | -9,154 | -12,253 | -18,124 | -27,446 |
| Prepaid Expenses and Supplies Ending inventory Beginning inventory Inventory change | 76,482 | 57,124 | 65,914 | 188,940 |
| | 85,826 | 124,752 | 50,063 | 170,608 |
| | -9,345 | -67,627 | 15,851 | 18,331 |
| Hedging Activities Ending inventory Withdrawals Beginning inventory Deposits Gain or loss | 5,180 | 7,709 | 724 | 15,285 |
| | 5,547 | 4,501 | 2,728 | 11,757 |
| | 6,222 | 8,567 | 1,888 | 14,659 |
| | 2,734 | 6,108 | 179 | 5,480 |
| | 1,771 | -2,465 | 1,385 | 6,903 |
| Other Current Assets Ending inventory Beginning inventory Inventory change | 3,336 | 6,045 | 5,828 | 3,586 |
| | 3,124 | 6,161 | 6,873 | 1,391 |
| | 211 | -116 | -1,045 | 2,194 |
| Breeding Livestock Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust | 111,131 | 92,652 | 86,439 | 169,913 |
| | 2,594 | 5,734 | 2,584 | - |
| | 101,611 | 89,564 | 76,290 | 151,889 |
| | 21,045 | 15,876 | 20,709 | 37,405 |
| | -8,930 | -7,055 | -7,976 | -19,381 |
| Other Capital Assets Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust | 63,767 | 84,854 | 43,254 | 165,827 |
| | 9,011 | 5,966 | - | 39,091 |
| | 63,269 | 90,779 | 34,175 | 170,112 |
| | 12,657 | 793 | 7,651 | 53,440 |
| | -3,147 | -752 | 1,428 | -18,635 |
| Accounts Payable Beginning inventory Ending inventory Inventory change | 12,611 | 23,923 | 4,151 | 18,211 |
| | 14,747 | 32,853 | 8,396 | 13,827 |
| | -2,137 | -8,929 | -4,245 | 4,384 |
| Accrued Interest Beginning inventory Ending inventory Inventory change | 14,578 | 33,782 | 4,570 | 19,091 |
| | 16,054 | 39,367 | 5,393 | 17,034 |
| | -1,478 | -5,599 | -821 | 2,057 |
| Total inventory change | -58,304 | -177,736 | -35,650 | 15,624 |
| Net operating profit | 100,400 | -50,935 | 51,909 | 378,707 |

Depreciation

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | Low 20% | 40 - 60% | High 20% |
|----------------------------------|----------------------|-----------|----------|-----------|
| Number of farms | 140 | 28 | 28 | 28 |
| Net operating profit | 100,400 | -50,935 | 51,909 | 378,707 |
| Machinery and Equipment | | | | |
| Ending inventory | 747,848 | 1,205,430 | 434,218 | 1,294,132 |
| Capital sales | 7,749 | 20,901 | 4,013 | 9,055 |
| Beginning inventory | 742,341 | 1,221,673 | 400,016 | 1,311,147 |
| Capital purchases | 80,572 | 115,289 | 70,433 | 115,388 |
| Depreciation, capital adjust. | -67,316 | -110,631 | -32,218 | -123,348 |
| Titled Vehicles | | | | |
| Ending inventory | 39,279 | 65,013 | 28,919 | 60,421 |
| Capital sales | 966 | 3,153 | 250 | - |
| Beginning inventory | 39,141 | 67,019 | 27,645 | 58,909 |
| Capital purchases | 5,089 | 7,863 | 3,299 | 8,026 |
| Depreciation, capital adjust. | -3,985 | -6,716 | -1,775 | -6,513 |
| Buildings and Improvements | | | | |
| Ending inventory | 265,433 | 463,933 | 122,877 | 508,969 |
| Capital sales | 1,429 | - | 7,143 | - |
| Beginning inventory | 252,716 | 466,361 | 126,658 | 458,348 |
| Capital purchases | 22,056 | 11,788 | 6,053 | 66,747 |
| Depreciation, capital adjust. | -7,910 | -14,217 | -2,691 | -16,127 |
| Total depreciation, capital adj. | -79,211 | -131,564 | -36,684 | -145,988 |
| Net farm income from operations | 21,189 | -182,499 | 15,225 | 232,719 |
| Gain or loss on capital sales | -996 | -3,176 | 2,628 | -8,803 |
| Net farm income | 20,193 | -185,675 | 17,853 | 223,916 |

Profitability Measures

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | Low 20% | 40 - 60% | High 20% |
|---------------------------------------|-------------------|-----------|-----------|-----------|
| Number of farms | 140 | 28 | 28 | 28 |
| Profitability (assets valued at cost) | | | | |
| Net farm income from operations | 21,189 | -182,499 | 15,225 | 232,719 |
| Rate of return on assets | 0.1 % | -4.4 % | -0.4 % | 3.8 % |
| Rate of return on equity | -2.0 % | -12.7 % | -1.9 % | 3.9 % |
| Operating profit margin | 0.5 % | -17.0 % | -1.6 % | 13.2 % |
| Asset turnover rate | 27.3 % | 25.8 % | 27.6 % | 28.5 % |
| Farm interest expense | 36,072 | 79,726 | 15,017 | 46,811 |
| Value of operator lbr and mgmt. | 53,681 | 70,414 | 37,072 | 94,312 |
| Return on farm assets | 3,580 | -173,187 | -6,830 | 185,218 |
| Average farm assets | 2,647,545 | 3,933,123 | 1,571,651 | 4,933,767 |
| Return on farm equity | -32,492 | -252,913 | -21,847 | 138,407 |
| Average farm equity | 1,654,684 | 1,985,441 | 1,143,145 | 3,526,291 |
| Value of farm production | 724,064 | 1,016,587 | 434,326 | 1,406,003 |

Liquidity & Repayment Capacity Measures North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | Low 20% | 40 - 60% | High 20% |
|---------------------------------|----------------------|----------|----------|-----------|
| Number of farms | 140 | 28 | 28 | 28 |
| Liquidity | | | | |
| Current ratio | 1.31 | 1.10 | 1.92 | 1.24 |
| Working capital | 124,140 | 73,726 | 168,536 | 170,995 |
| Working capital to gross inc | 20.5 % | 8.3 % | 42.3 % | 15.6 % |
| Current assets | 525,544 | 800,916 | 351,667 | 888,277 |
| Current liabilities | 401,403 | 727,189 | 183,132 | 717,282 |
| Gross revenues (accrual) | 605,594 | 883,719 | 398,698 | 1,092,837 |
| Repayment capacity | | | | |
| Net farm income from operations | 21,189 | -182,499 | 15,225 | 232,719 |
| Depreciation | 79,211 | 131,564 | 36,684 | 145,988 |
| Personal income | 38,792 | 42,279 | 63,736 | 18,280 |
| Family living/owner withdrawals | -67,237 | -89,034 | -44,669 | -89,919 |
| Cash discrepancy | -79 | -569 | -153 | 124 |
| Payments on personal debt | -3,546 | -2,688 | -3,570 | -3,056 |
| Income taxes paid | -21,985 | -26,766 | -16,027 | -31,435 |
| Interest on term debt | 18,189 | 22,738 | 12,708 | 23,895 |
| Capital debt repayment capacity | 64,611 | -104,406 | 64,088 | 296,472 |
| Scheduled term debt payments | -124,051 | -177,991 | -48,698 | -254,661 |
| Capital debt repayment margin | -59,439 | -282,397 | 15,390 | 41,811 |
| Cash replacement allowance | -49,393 | -76,841 | -30,985 | -105,215 |
| Replacement margin | -108,832 | -359,238 | -15,595 | -63,403 |
| Term debt coverage ratio | 0.52 | -0.59 | 1.32 | 1.16 |
| Replacement coverage ratio | 0.37 | -0.41 | 0.80 | 0.82 |

Balance Sheet at Cost Values North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015

(Farms Sorted By Net Farm Income)

| | Avg. Of <u>All Farms</u> | Low 20% | 40 - 60% | High 20% |
|---|-----------------------------|---------------|-----------------|--------------------|
| Number of farms | 127 | 24 | 27 | 21 |
| Assets | | | | |
| Current Farm Assets | 25 524 | 00.000 | 0.000 | 55,000 |
| Cash and checking balance | 25,561 | 28,806 | 6,632 | 55,082 |
| Prepaid expenses & supplies | 54,410 | 58,133 | 43,525 | 112,748 4,257 |
| Growing crops Accounts receivable | 1,149 21,909 | 131 22,124 | 1,643 15,314 | 45,838 |
| Hedging accounts | 3,486 | 8,160 | 750 | 7,883 |
| Crops held for sale or feed | 333,335 | 566,756 | 246,639 | 501,660 |
| Crops under government loan | 3,220 | - | 3,667 | 10,286 |
| Market livestock held for sale | 81,275 | 113,198 | 32,412 | 150,000 |
| Other current assets | 1,197 | 3,606 | 1,086 | 524 |
| Total current farm assets | 525,544 | 800,916 | 351,667 | 888,277 |
| Intermediate Farm Assets | | | | |
| Breeding livestock | 91,741 | 32,632 | 83,722 | 134,340 |
| Machinery and equipment | 582,496 | 920,205 | 379,619 | 968,090 |
| Titled vehicles | 30,886 | 57,692 | 23,360 | 37,754 |
| Other intermediate assets | 7,474 712,597 | 5,609 | 15,835 | 5,855 1,146,039 |
| Total intermediate farm assets | 712,597 | 1,016,138 | 502,536 | 1,140,039 |
| Long Term Farm Assets Farm land | 657,889 | 889,662 | 452,544 | 1,337,061 |
| Buildings and improvements | 193,919 | 352,872 | 102,563 | 342,206 |
| Other long-term assets | 22,343 | 65,627 | 18,650 | 15,516 |
| Total long-term farm assets | 874,151 | 1,308,161 | 573,757 | 1,694,784 |
| Total Farm Assets | 2,112,291 | 3,125,214 | 1,427,960 | 3,729,100 |
| Total Nonfarm Assets | 320,015 | 398,550 | 229,555 | 547,897 |
| Total Assets | 2,432,306 | 3,523,764 | 1,657,516 | 4,276,997 |
| Liabilities Current Farm Liabilities | | | | |
| Accrued interest | 15,687 | 40,339 | 5,590 | 18,996 |
| Accounts payable | 13,824 | 27,267 | 8,707 | 17,128 |
| Current notes | 267,121 | 548,882 | 104,019 | 398,815 |
| Government crop loans | 1,856 | - | 2,044 | 5,824 |
| Principal due on term debt | 102,916 | 110,702 | 62,771 | 276,519 |
| Total current farm liabilities | 401,403 | 727,189 | 183,132 | 717,282 |
| Total intermediate farm liabs | 159,323 | 331,939 | 89,296 | 191,143 |
| Total long term farm liabilities | 347,577 | 630,530 | 203,120 | 530,226 |
| Total farm liabilities | 908,303 | 1,689,658 | 475,547 | 1,438,651 |
| Total nonfarm liabilities | 48,851 | 81,227 | 28,197 | 30,558 |
| Total liabilities | 957,154 | 1,770,885 | 503,744 | 1,469,209 |
| Net worth (farm and nonfarm) | 1,475,152 | 1,752,879 | 1,153,772 | 2,807,789 |
| Net worth change | -14,112 | -158,931 | 18,151 | 101,228 |
| Percent net worth change | -1 % | -8 % | 2 % | 4 % |
| Ratio Analysis | 2/ | 2.07 | 0/ | 24.24 |
| Current farm liabilities / assets | 76 % | 91 % | 52 % | 81 % |
| Intermediate farm liab. / assets | 22 % | 33 % | 18 % | 17 % |
| Long term farm liab. / assets | 40 % | 48 % 50 % | 35 % 30 % | 31 % |
| Total debt to asset ratio | 39 % | 50 % | 30 % | 34 % |

Statement Of Cash Flows

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | Low 20% | 40 - 60% | High 20% |
|---------------------------------------|----------------------|------------|----------|------------|
| | | | | |
| Number of farms | 140 | 28 | 28 | 28 |
| Beginning cash (farm & nonfarm) | 43,665 | 45,349 | 33,317 | 55,589 |
| Cash Provided By Operating Activities | | | | |
| Gross cash farm income | 823,293 | 1,244,439 | 485,575 | 1,499,691 |
| Total cash farm expense | -664,589 | -1,117,638 | -398,016 | -1,136,608 |
| Net cash from hedging transactions | 2,813 | -1,607 | 2,550 | 6,277 |
| Cash provided by operating | 161,517 | 125,194 | 90,109 | 369,360 |
| Cash Provided By Investing Activities | | | | |
| Sale of breeding livestock | 2,594 | 5,734 | 2,584 | - |
| Sale of machinery & equipment | 8,458 | 22,476 | 4,013 | 10,132 |
| Sale of titled vehicles | 1,129 | 3,964 | 250 | - |
| Sale of farm land | 13,476 | 45,489 | 4,075 | - |
| Sale of farm buildings | 1,429 | - | 7,143 | - |
| Sale of other farm assets | 7,035 | 5,966 | - | 29,211 |
| Sale of nonfarm assets | 2,785 | 5,379 | 1,609 | 1,893 |
| Purchase of breeding livestock | -21,045 | -15,876 | -20,709 | -37,405 |
| Purchase of machinery & equip. | -80,572 | -115,289 | -70,433 | -115,388 |
| Purchase of titled vehicles | -5,089 | -7,863 | -3,299 | -8,026 |
| Purchase of farm land | -37,850 | -62,167 | -62,629 | -26,619 |
| Purchase of farm buildings | -22,056 | -11,788 | -6,053 | -66,747 |
| Purchase of other farm assets | -12,657 | -793 | -7,651 | -53,440 |
| Purchase of nonfarm assets | -26,518 | -40,047 | -11,002 | -36,319 |
| Cash provided by investing | -168,879 | -164,815 | -162,102 | -302,708 |
| Cash Provided By Financing Activities | 6 | | | |
| Money borrowed | 682,571 | 1,544,531 | 320,558 | 823,866 |
| Principal payments | -635,903 | -1,441,977 | -257,755 | -799,388 |
| Personal income | 38,792 | 42,279 | 63,736 | 18,280 |
| Family living/owner withdrawals | -67,237 | -89,034 | -44,669 | -89,919 |
| Income and social security tax | -21,423 | -25,427 | -15,991 | -31,431 |
| Capital contributions | - | - | - | - |
| Capital distributions | -3,144 | - | -15,718 | - |
| Dividends paid | - | - | - | - |
| Cash gifts and inheritances | 5,431 | 6,510 | 9,035 | 1,018 |
| Gifts given | -1,864 | -3,856 | - | -341 |
| Other cash flows | · <u>-</u> | · - | - | - |
| Cash provided by financing | -2,779 | 33,026 | 59,196 | -77,915 |
| Net change in cash balance | -10,141 | -6,595 | -12,797 | -11,263 |
| Ending cash (farm & nonfarm) | 33,445 | 38,185 | 20,366 | 44,449 |
| Discrepancy | 79 | 569 | 153 | -124 |

Financial Standards Measures North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | <u>Low 20%</u> | 40 - 60% | High 20% |
|---------------------------------|----------------------|----------------|----------|----------|
| Number of farms | 140 | 28 | 28 | 28 |
| Liquidity | | | | |
| Current ratio | 1.31 | 1.10 | 1.92 | 1.24 |
| Working capital | 124,140 | 73,726 | 168,536 | 170,995 |
| Working capital to gross inc | 20.5 % | 8.3 % | 42.3 % | 15.6 % |
| Solvency (cost) | | | | |
| Farm debt to asset ratio | 43 % | 54 % | 33 % | 39 % |
| Farm equity to asset ratio | 57 % | 46 % | 67 % | 61 % |
| Farm debt to equity ratio | 0.75 | 1.18 | 0.50 | 0.63 |
| Profitability (cost) | | | | |
| Rate of return on farm assets | 0.1 % | -4.4 % | -0.4 % | 3.8 % |
| Rate of return on farm equity | -2.0 % | -12.7 % | -1.9 % | 3.9 % |
| Operating profit margin | 0.5 % | -17.0 % | -1.6 % | 13.2 % |
| Net farm income | 20,193 | -185,675 | 17,853 | 223,916 |
| EBITDA | 136,471 | 28,791 | 66,926 | 425,518 |
| Repayment Capacity | | | | |
| Capital debt repayment capacity | 64,611 | -104,406 | 64,088 | 296,472 |
| Capital debt repayment margin | -59,439 | -282,397 | 15,390 | 41,811 |
| Replacement margin | -108,832 | -359,238 | -15,595 | -63,403 |
| Term debt coverage ratio | 0.52 | -0.59 | 1.32 | 1.16 |
| Replacement coverage ratio | 0.37 | -0.41 | 0.80 | 0.82 |
| Efficiency | | | | |
| Asset turnover rate (cost) | 27.3 % | 25.8 % | 27.6 % | 28.5 % |
| Operating expense ratio | 82.5 % | 97.5 % | 84.8 % | 71.4 % |
| Depreciation expense ratio | 10.2 % | 11.4 % | 8.3 % | 9.8 % |
| Interest expense ratio | 4.6 % | 6.9 % | 3.4 % | 3.1 % |
| Net farm income ratio | 2.6 % | -16.2 % | 4.1 % | 15.0 % |

Crop Production and Marketing Summary North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | Low 20% | 40 - 60% | High 20% |
|----------------------------------|----------------------|----------|-------------------|----------|
| Number of farms | 140 | 28 | 28 | 28 |
| Acreage Summary | | | | |
| Total acres owned | 1,010 | 1,235 | 679 | 1,818 |
| Total crop acres | 2,148 | 3,150 | 1,427 | 3,873 |
| Crop acres owned | 569 | 866 | 394 | 775 |
| Crop acres cash rented | 1,486 | 2,141 | 910 | 3,017 |
| Crop acres share rented | 93 | 143 | 123 | 81 |
| Total pasture acres | 591 | 165 | 525 | 1,142 |
| Percent crop acres owned | 26 % | 27 % | 28 % | 20 % |
| Mach invest/crop acre cost | 365 | 406 | 310 | 352 |
| Average Price Received (Cash Sal | es Only) | | | |
| Soybeans per bushel | 9.33 | 9.22 | 9.18 | 9.76 |
| Corn per bushel | 3.49 | 3.38 | 3.58 | 3.71 |
| Wheat, Spring per bushel | 5.73 | 5.81 | 5.41 | 5.97 |
| Barley per bushel | 5.88 | - | - | 6.13 |
| Beans, Pinto per cwt | 21.22 | - | - | - |
| Sunflowers per cwt | 19.38 | - | - | - |
| Canola per cwt | 15.75 | - | - | - |
| Wheat, Winter per bushel | 4.47 | - | - | - |
| Flax per bushel | 10.34 | - | - | - |
| Hay, Grass per ton | 48.51 | - | _ | _ |
| Soybeans, Food per bushel | 13.56 | - | - | - |
| Average Yield Per Acre | | | | |
| Soybeans (bushel) | 30.50 | 28.98 | 31.33 | 31.20 |
| Wheat, Spring (bushel) | 57.90 | 58.07 | 57.22 | 58.56 |
| Corn (bushel) | 115.85 | 116.03 | 109.95 | 118.45 |
| Pasture (aum) | 0.998 | 0.947 | 0.847 | 1.23 |
| Barley (bushel) | 72.96 | 66.88 | 62.47 | 75.72 |
| Hay, Mixed Alfalfa/Grass (ton) | 1.86 | - | 1.96 | 1.61 |
| Hay, Grass (ton) | 1.26 | _ | 1.12 | 1.50 |
| Hay, Small Grain (ton) | 2.34 | _ | 2.33 | 2.55 |
| Sunflowers (cwt) | 16.52 | _ | 19.82 | 2.00 |
| Hay, Alfalfa (ton) | 3.12 | - - | 10.02 | 2.97 |
| Corn Silage (ton) | 14.09 | _ | _ | 10.77 |
| Beans, Pinto (cwt) | 11.39 | _ | _ _ | 10.77 |
| Wheat, Winter (bushel) | 49.88 | - | 47.27 | - |
| Flax (bushel) | 20.49 | - - | 1 1.41 | - |
| Peas, Field (bushel) | 42.52 | _ | _ | _ |
| Soybeans, Food (bushel) | 25.34 | <u>-</u> | _ | _ |
| ,, (2001101) | 20.04 | _ | _ | _ |

Household and Personal Expenses North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | Low 20% | 40 - 60% | High 20% |
|------------------------------------|----------------------|---------|--------------|----------|
| Number of farms | 52 | 10 | 7 | 9 |
| Number of family | | | | |
| Average family size | 2.9 | 3.2 | 2.9 | 3.1 |
| Family Living Expenses | | | | |
| Food and meals expense | 9,127 | 9,525 | 9,816 | 9,833 |
| Medical care | 4,542 | 7,863 | 4,272 | 3,463 |
| Health insurance | 7,621 | 10,446 | 8,395 | 8,735 |
| Cash donations | 2,178 | 3,581 | 1,505 | 2,548 |
| Household supplies | 6,142 | 8,104 | 3,425 | 4,859 |
| Clothing | 2,184 | 1,958 | 2,062 | 2,668 |
| Personal care | 6,219 | 10,432 | 3,156 | 7,342 |
| Child / Dependent care | 494 | 130 | 947 | 1,315 |
| Alimony and child support | 65 | - | - | - |
| Gifts | 1,999 | 2,131 | 2,462 | 2,535 |
| Education | 1,530 | 2,819 | 528 | 1,395 |
| Recreation | 3,710 | 7,016 | 2,186 | 5,447 |
| Utilities (household share) | 3,197 | 4,399 | 2,618 | 3,401 |
| Personal vehicle operating exp | 2,649 | 3,602 | 1,888 | 2,366 |
| Household real estate taxes | 293 | 574 | 188 | 315 |
| Dwelling rent | 115 | - | - | 178 |
| Household repairs | 1,822 | 5,063 | 763 | 1,314 |
| Personal interest | 977 | 689 | - | 727 |
| Disability / Long term care ins | 396 | 78 | 656 | 1,191 |
| Life insurance payments | 2,342 | 2,555 | 1,586 | 5,186 |
| Personal property insurance | 414 | 767 | 424 | 381 |
| Miscellaneous | 900 | 2,171 | - | 882 |
| Total cash family living expense | 58,917 | 83,905 | 46,878 | 66,082 |
| Family living from the farm | 110 | 120 | 143 | - |
| Total family living | 59,026 | 84,025 | 47,021 | 66,082 |
| Other Nonfarm Expenditures | | | | |
| Income taxes | 23,720 | 29,201 | 32,532 | 24,786 |
| Furnishing & appliance purchases | 308 | 151 | , - | 469 |
| Nonfarm vehicle purchases | 3,829 | 4,390 | 3,686 | 4,101 |
| Nonfarm real estate purchases | 7,493 | 36,284 | , - | - |
| Other nonfarm capital purchases | 9,470 | 18,267 | 7,143 | - |
| Nonfarm savings & investments | 7,236 | 6,872 | 1,112 | 16,485 |
| Total other nonfarm expenditures | 52,056 | 95,164 | 44,472 | 45,842 |
| Total cash family living | | | | |
| investment & nonfarm capital purch | 110,973 | 179,069 | 91,351 | 111,924 |

Operator and Labor Information North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | <u>Low 20%</u> | 40 - 60% | High 20% |
|---------------------------------|-------------------|----------------|-----------|-----------|
| Number of farms | 140 | 28 | 28 | 28 |
| Operator Information | | | | |
| Average number of operators | 1.1 | 1.2 | 1.0 | 1.3 |
| Average age of operators | 46.5 | 49.9 | 41.7 | 45.3 |
| Average number of years farming | 22.3 | 26.9 | 18.3 | 22.8 |
| Results Per Operator | | | | |
| Working capital | 237,928 | 40,686 | 270,837 | 634,496 |
| Total assets (cost) | 2,596,499 | 3,501,827 | 1,830,697 | 4,145,676 |
| Total liabilities | 931,834 | 1,696,112 | 492,037 | 1,108,639 |
| Net worth (cost) | 1,664,666 | 1,805,715 | 1,338,660 | 3,037,037 |
| Gross farm income | 680,539 | 946,791 | 439,962 | 1,126,020 |
| Total farm expense | 661,999 | 1,097,085 | 424,737 | 949,909 |
| Net farm income from operations | 18,540 | -150,293 | 15,225 | 176,112 |
| Net nonfarm income | 33,943 | 34,818 | 63,736 | 13,834 |
| Family living & tax withdrawals | 78,139 | 95,834 | 60,849 | 91,742 |
| Total acres owned | 883.7 | 1,017.1 | 679.1 | 1,375.9 |
| Total crop acres | 1,879.5 | 2,593.7 | 1,427.0 | 2,931.2 |
| Crop acres owned | 498.0 | 713.2 | 393.7 | 586.7 |
| Crop acres cash rented | 1,300.1 | 1,763.2 | 910.2 | 2,283.4 |
| Crop acres share rented | 81.5 | 117.4 | 123.1 | 61.1 |
| Total pasture acres | 516.9 | 136.2 | 524.7 | 864.5 |
| Labor Analysis | | | | |
| Number of farms | 140 | 28 | 28 | 28 |
| Total unpaid labor hours | 1,945 | 1,961 | 1,533 | 2,661 |
| Total hired labor hours | 1,464 | 3,841 | 712 | 1,934 |
| Total labor hours per farm | 3,409 | 5,802 | 2,244 | 4,595 |
| Unpaid hours per operator | 1,701 | 1,615 | 1,533 | 2,014 |

Nonfarm Summary

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | Low 20% | 40 - 60% | High 20% |
|-----------------------------|-------------------|---------|----------|----------|
| Number of farms | 140 | 28 | 28 | 28 |
| Nonfarm Income | | | | |
| Personal wages & salary | 23,776 | 19,097 | 36,878 | 9,221 |
| Net nonfarm business income | 5,845 | 5,744 | 23,373 | 123 |
| Personal rental income | 2,502 | 10,598 | - | 138 |
| Personal interest income | 644 | 360 | 12 | 1,923 |
| Personal cash dividends | 119 | 357 | - | 235 |
| Tax refunds | 797 | 697 | 818 | 1,201 |
| Other nonfarm income | 5,110 | 5,426 | 2,655 | 5,440 |
| Total nonfarm income | 38,792 | 42,279 | 63,736 | 18,280 |
| Gifts and inheritances | 5,431 | 6,510 | 9,035 | 1,018 |

Financial Summary

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Gross Farm Income)

| | Avg. Of All Farms | Less than 100,000 | 100,001 - 250,000 | 250,001 - 500,000 | 500,001 - 1,000,000 | 1,000,001- 2,000,000 | Over 2,000,000 |
|---------------------------------|----------------------|-------------------|----------------------|----------------------|------------------------|-------------------------|-------------------|
| Number of farms | 140 | 14 | 19 | 37 | 39 | 18 | 13 |
| Income Statement | | | | | | | |
| Gross cash farm income | 823,293 | 59,921 | 178,256 | 357,794 | 739,606 | 1,492,256 | 3,237,818 |
| Total cash farm expense | 664,589 | 78,236 | 129,364 | 305,213 | 562,922 | 1,182,691 | 2,688,768 |
| Net cash farm income | 158,704 | -18,315 | 48,892 | 52,581 | 176,684 | 309,565 | 549,050 |
| Inventory change | -58,304 | 35,138 | -8,589 | -11,273 | -84,185 | -159,279 | -148,000 |
| Depreciation | -79,211 | -6,728 | -12,314 | -27,230 | -71,645 | -145,734 | -333,574 |
| Net farm income from operations | 21,189 | 10,095 | 27,988 | 14,078 | 20,854 | 4,552 | 67,477 |
| Gain or loss on capital sales | -996 | , - | 789 | 4,620 | -3,084 | 1,222 | -17,468 |
| Average net farm income | 20,193 | 10,095 | 28,777 | 18,698 | 17,770 | 5,774 | 50,009 |
| Median net farm income | 18,632 | 9,040 | 23,835 | 20,537 | 7,463 | 10,099 | 159,408 |
| Profitability (cost) | | | | | | | |
| Rate of return on assets | 0.1 % | 0.8 % | 2.8 % | 0.0 % | 0.2 % | -0.2 % | 0.1 % |
| Rate of return on equity | -2.0 % | -1.9 % | 2.2 % | -2.3 % | -2.2 % | -2.7 % | -1.5 % |
| Operating profit margin | 0.5 % | 2.8 % | 9.6 % | 0.1 % | 0.7 % | -0.7 % | 0.3 % |
| Asset turnover rate | 27.3 % | 28.0 % | 29.5 % | 24.4 % | 27.8 % | 25.5 % | 29.3 % |
| Liquidity & Repayment (end of y | | | | | | | |
| Current assets | 525,544 | 94,983 | 151,581 | 315,523 | 522,258 | 1,413,774 | 1,722,719 |
| Current liabilities | 401,403 | 67,581 | 77,990 | 199,211 | 392,330 | 1,232,518 | 1,372,460 |
| Current ratio | 1.31 | 1.41 | 1.94 | 1.58 | 1.33 | 1.15 | 1.26 |
| Working capital | 124,140 | 27,402 | 73,591 | 116,312 | 129,928 | 181,256 | 350,259 |
| Working capital to gross inc | 20.5 % | 27.3 % | 39.8 % | 33.3 % | 20.0 % | 13.1 % | 15.3 % |
| Term debt coverage ratio | 0.52 | 1.73 | 0.98 | 0.85 | 0.47 | 0.19 | 0.94 |
| Replacement coverage ratio | 0.37 | 1.63 | 0.93 | 0.58 | 0.35 | 0.15 | 0.49 |
| Term debt to EBITDA | 3.77 | 4.91 | 3.89 | 5.00 | 4.26 | 4.86 | 2.27 |
| Solvency (end of year at cost) | | | | | | | |
| Number of sole proprietors | 127 | 14 | 19 | 36 | 37 | 14 | 7 |
| Total assets | 2,432,306 | 495,692 | 736,940 | 1,691,720 | 2,477,374 | 5,866,466 | 7,609,438 |
| Total liabilities | 957,154 | 288,344 | 367,074 | 569,812 | 912,520 | 2,723,930 | 2,590,837 |
| Net worth | 1,475,152 | 207,348 | 369,866 | 1,121,907 | 1,564,854 | 3,142,536 | 5,018,601 |
| Net worth change | -14,112 | 28,767 | 15,817 | 9,659 | -19,009 | -116,366 | -72,973 |
| Farm debt to asset ratio | 43 % | 63 % | 53 % | 38 % | 40 % | 50 % | 37 % |
| Total debt to asset ratio | 39 % | 58 % | 50 % | 34 % | 37 % | 46 % | 34 % |
| Change in earned net worth % | -1 % | 16 % | 4 % | 1 % | -1 % | -4 % | -1 % |
| Nonfarm Information | | | | | | | |
| Net nonfarm income | 38,792 | 52,144 | 43,680 | 58,793 | 27,286 | 13,063 | 30,481 |
| Farms reporting living expenses | 52 | 5 | 3 | 18 | 18 | 4 | 4 |
| Total family living expense | 59,026 | 32,971 | - | 49,585 | 65,758 | - | - |
| Crop Acres | | | | | | | |
| Total crop acres | 2,148 | 261 | 524 | 1,205 | 1,907 | 3,726 | 7,777 |
| Total crop acres owned | 569 | 40 | 146 | 423 | 627 | 916 | 1,519 |
| Total crop acres cash rented | 1,486 | 221 | 340 | 703 | 1,168 | 2,689 | 6,038 |
| Total crop acres share rented | 93 | - | 38 | 79 | 112 | 121 | 221 |
| Machinery value per crop acre | 365 | 233 | 197 | 303 | 378 | 392 | 386 |

Financial Summary

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Age of Operator)

| | Avg. Of All Farms | Less Than 31 | <u>31 - 40</u> | <u>41 - 50</u> | <u>51 - 60</u> | Over 60 |
|----------------------------------|----------------------|-----------------|----------------|----------------|----------------|-----------|
| Number of farms | 140 | 24 | 25 | 23 | 36 | 32 |
| Income Statement | | | | | | |
| Gross cash farm income | 823,293 | 328,784 | 598,160 | 1,235,150 | 1,049,590 | 819,452 |
| Total cash farm expense | 664,589 | 277,189 | 502,819 | 1,027,840 | 837,932 | 625,425 |
| Net cash farm income | 158,704 | 51,596 | 95,341 | 207,310 | 211,658 | 194,027 |
| Inventory change | -58,304 | 8,034 | -24,511 | -91,362 | -59,664 | -109,169 |
| Depreciation | -79,211 | -29,835 | -49,061 | -120,213 | -114,379 | -70,763 |
| Net farm income from operations | 21,189 | 29,795 | 21,769 | -4,266 | 37,615 | 14,096 |
| Gain or loss on capital sales | -996 | 11 | 1,608 | 5,445 | -9,175 | 786 |
| Average net farm income | 20,193 | 29,807 | 23,378 | 1,179 | 28,440 | 14,882 |
| Median net farm income | 18,632 | 20,375 | 27,612 | 18,905 | 3,648 | 13,821 |
| Profitability (cost) | | | | | | |
| Rate of return on assets | 0.1 % | 2.5 % | 0.0 % | -0.5 % | 0.3 % | 0.0 % |
| Rate of return on equity | -2.0 % | 0.3 % | -2.2 % | -3.6 % | -1.4 % | -1.7 % |
| Operating profit margin | 0.5 % | 5.9 % | 0.1 % | -1.8 % | 1.3 % | -0.1 % |
| Asset turnover rate | 27.3 % | 41.3 % | 34.9 % | 29.0 % | 25.9 % | 22.1 % |
| Liquidity & Repayment (end of ye | ear) | | | | | |
| Current assets | 525,544 | 221,984 | 367,784 | 830,856 | 741,229 | 445,950 |
| Current liabilities | 401,403 | 143,594 | 218,993 | 620,037 | 650,127 | 324,269 |
| Current ratio | 1.31 | 1.55 | 1.68 | 1.34 | 1.14 | 1.38 |
| Working capital | 124,140 | 78,390 | 148,790 | 210,818 | 91,102 | 121,681 |
| Working capital to gross inc | 20.5 % | 23.7 % | 33.7 % | 22.1 % | 10.9 % | 26.3 % |
| Term debt coverage ratio | 0.52 | 0.88 | 0.69 | 0.38 | 0.88 | 0.15 |
| Replacement coverage ratio | 0.37 | 0.76 | 0.56 | 0.25 | 0.59 | 0.11 |
| Term debt to EBITDA | 3.77 | 4.36 | 3.52 | 3.24 | 3.64 | 4.42 |
| Solvency (end of year at cost) | | | | | | |
| Number of sole proprietors | 127 | 23 | 23 | 19 | 33 | 29 |
| Total assets | 2,432,306 | 945,324 | 1,569,622 | 2,990,513 | 3,436,947 | 2,786,900 |
| Total liabilities | 957,154 | 519,130 | 640,612 | 1,215,527 | 1,470,318 | 802,380 |
| Net worth | 1,475,152 | 426,194 | 929,010 | 1,774,986 | 1,966,630 | 1,984,520 |
| Net worth change | -14,112 | 23,540 | 2,962 | -11,074 | -51,592 | -16,858 |
| Farm debt to asset ratio | 43 % | 56 % | 44 % | 42 % | 47 % | 33 % |
| Total debt to asset ratio | 39 % | 55 % | 41 % | 41 % | 43 % | 29 % |
| Change in earned net worth % | -1 % | 6 % | 0 % | -1 % | -3 % | -1 % |
| Nonfarm Information | | | | | | |
| Net nonfarm income | 38,792 | 29,168 | 45,338 | 31,159 | 27,970 | 58,555 |
| Farms reporting living expenses | 52 | 4 | 11 | 5 | 16 | 16 |
| Total family living expense | 59,026 | - | 49,130 | 94,589 | 62,015 | 61,728 |
| Crop Acres | | | | | | |
| Total crop acres | 2,148 | 1,258 | 1,579 | 3,118 | 2,738 | 1,900 |
| Total crop acres owned | 569 | 94 | 156 | 883 | 786 | 779 |
| Total crop acres cash rented | 1,486 | 1,112 | 1,314 | 2,089 | 1,861 | 1,044 |
| Total crop acres share rented | 93 | 52 | 109 | 145 | 91 | 77 |
| Machinery value per crop acre | 365 | 222 | 338 | 359 | 398 | 406 |
| | | | | | | |

Financial Summary North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Farm Type)

| | Avg. Of All Farms | Crop | Beef | Crop and Beef | Othe |
|--|--------------------------------|--------------------|--------------------|--------------------|-------------------|
| Number of farms | 140 | 82 | 22 | 21 | 13 |
| | | 52 | | | |
| Income Statement Gross cash farm income | 922 202 | 024 072 | 449 740 | 640 741 | 709 020 |
| | 823,293 | 931,073 | 448,740 364,476 | 640,741 | 708,930 |
| Total cash farm expense Net cash farm income | 664,589 158,704 | 748,616 | 364,476 | 502,696 | 549,16° |
| | -58,304 | 182,456 -76,126 | 84,264 -25,232 | 138,045 -56,138 | 159,769 23,622 |
| Inventory change Depreciation | -56,30 4 -79,211 | -76,126 -95,903 | -25,232 -24,279 | -50,136 -57,679 | -82,139 |
| | -79,211 21,189 | • | | | |
| Net farm income from operations | -996 | 10,427 | 34,753 | 24,227 | 101,252 |
| Gain or loss on capital sales | | -2,066 8,361 | 682 | 7,008 | -10,16 |
| Average net farm income Median net farm income | 20,193 18,632 | 8,361 8,246 | 35,435 28,725 | 31,236 18,905 | 91,087 34,717 |
| Drafitability (2004) | | | | | |
| Profitability (cost) | 0.1 % | -0.5 % | 2.5 % | 0.5 % | 4.0 % |
| Rate of return on assets | -2.0 % | | | | |
| Rate of return on equity | | -2.4 % | 1.6 % | -1.8 % | 4.5 % |
| Operating profit margin | 0.5 % | -1.9 % | 12.2 % | 2.2 % | 15.8 % |
| Asset turnover rate | 27.3 % | 28.2 % | 20.9 % | 24.6 % | 25.2 % |
| Liquidity & Repayment (end of year | | | | | |
| Current assets | 525,544 | 590,485 | 386,898 | 508,347 | 428,854 |
| Current liabilities | 401,403 | 376,799 | 297,463 | 434,466 | 765,01 |
| Current ratio | 1.31 | 1.57 | 1.30 | 1.17 | 0.56 |
| Working capital | 124,140 | 213,686 | 89,435 | 73,881 | -336,16 |
| Working capital to gross inc | 20.5 % | 32.0 % | 21.5 % | 12.5 % | -52.9 % |
| Term debt coverage ratio | 0.52 | 0.68 | 0.87 | 0.65 | 0.33 |
| Replacement coverage ratio | 0.37 | 0.40 | 0.78 | 0.53 | 0.30 |
| Term debt to EBITDA | 3.77 | 3.43 | 3.62 | 4.28 | 3.86 |
| Solvency (end of year at cost) | | | | | |
| Number of sole proprietors | 127 | 73 | 22 | 21 | 10 |
| Total assets | 2,432,306 | 2,709,232 | 1,341,524 | 2,420,313 | 3,040,51 |
| Total liabilities | 957,154 | 927,467 | 688,087 | 952,749 | 1,836,863 |
| Net worth | 1,475,152 | 1,781,764 | 653,436 | 1,467,564 | 1,203,648 |
| Net worth change | -14,112 | -31,338 | 36,270 | -15,817 | -3,646 |
| Farm debt to asset ratio | 43 % | 38 % | 54 % | 43 % | 65 % |
| Total debt to asset ratio | 39 % | 34 % | 51 % | 39 % | 60 % |
| Change in earned net worth % | -1 % | -2 % | 6 % | -1 % | 0 % |
| Nonfarm Information | | | | | |
| Net nonfarm income | 38,792 | 44,000 | 49,219 | 20,082 | 22,09 |
| Farms reporting living expenses | 52 | 35 | 5 | 9 | 3 |
| Total family living expense | 59,026 | 59,942 | 54,774 | 47,704 | |
| Crop Acres | | | | | |
| Total crop acres | 2,148 | 2,725 | 566 | 1,801 | 1,447 |
| Total crop acres owned | 569 | 670 | 196 | 681 | 366 |
| Total crop acres cash rented | 1,486 | 1,922 | 347 | 1,068 | 1,039 |
| Total crop acres share rented | 93 | 133 | 23 | 52 | 43 |
| | 365 | 362 | 397 | 326 | 469 |

EXPLANATORY NOTES FOR CROPS TABLES

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

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

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

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

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

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

Barley on Owned Land

| | Avg. Of All Farms |
|--|---|
| Number of farms | 15 |
| Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Crop insurance per acre Gross return per acre | 335.80 76.77 100.00 5.04 387.32 6.96 394.28 |
| 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 | 17.05 58.91 28.20 17.12 13.46 16.02 8.13 2.13 1.49 162.51 231.78 |
| Overhead Expenses Hired labor Machinery 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 | 7.56 2.86 6.20 5.09 4.11 0.50 12.27 39.65 4.50 82.73 245.24 149.04 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 13.85 162.90 21.30 141.59 |
| Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management | 2.12 3.19 2.92 3.20 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 5.04 76.37 1.02 |

Barley on Cash Rent

| | Avg. Of <u>All Farms</u> |
|--|---|
| Number of farms | 16 |
| Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Crop insurance per acre Gross return per acre | 695.40 71.30 100.00 5.26 374.99 7.58 382.57 |
| 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 | 16.47 59.76 28.54 15.97 13.30 15.02 6.92 64.22 1.24 1.24 222.68 159.89 |
| Overhead Expenses Hired labor Machinery 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 | 9.74 1.79 4.48 3.47 2.93 0.73 35.41 4.92 63.48 286.16 96.41 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 12.20 108.60 19.06 89.55 |
| Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management | 3.12 4.01 3.74 4.00 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 5.26 69.40 0.96 |

Crop Enterprise Analysis

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Return)

Beans, Pinto on Owned Land

| | Avg. Of <u>All Farms</u> |
|---|---|
| Number of farms | 5 |
| Acres Yield per acre (cwt.) Operators share of yield % Value per cwt. Total product return per acre Crop insurance per acre Gross return per acre | 185.93 13.21 100.00 21.29 281.23 92.90 374.13 |
| Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 42.27 48.96 52.96 22.62 13.27 14.88 6.60 4.44 206.00 168.13 |
| Overhead Expenses Custom hire Hired labor Machinery leases RE & pers. property taxes Farm insurance Utilities Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre | 1.39 3.89 1.63 4.43 2.83 2.47 72.84 22.60 7.92 119.99 325.99 48.14 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 7.21 55.34 20.67 34.68 |
| Cost of Production Total direct expense per cwt. Total dir & ovhd exp per cwt. Less govt & other income With labor & management | 15.59 24.68 17.10 18.66 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 21.29 58.31 1.02 |

Beans, Pinto on Cash Rent

| | Avg. Of All Farms |
|--|--|
| Number of farms | 6 |
| Acres Yield per acre (cwt.) Operators share of yield % Value per cwt. Total product return per acre Crop insurance per acre Gross return per acre | 531.89 10.86 100.00 20.86 226.61 76.15 302.76 |
| 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 | 37.90 44.70 54.12 17.56 14.08 16.68 2.46 66.43 7.20 0.25 261.38 41.38 |
| Overhead Expenses Custom hire Hired labor Machinery 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 | 1.17 9.55 2.81 4.27 3.85 0.46 2.83 29.50 5.89 60.33 321.71 -18.95 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 8.88 -10.07 22.44 -32.51 |
| Cost of Production Total direct expense per cwt. Total dir & ovhd exp per cwt. Less govt & other income With labor & management | 24.06 29.61 21.79 23.85 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 20.86 66.69 1.13 |

Canola on Owned Land

| | Avg. Of All Farms |
|---|---|
| Number of farms | 6 |
| Acres Yield per acre (cwt.) Operators share of yield % Value per cwt. Total product return per acre Gross return per acre | 217.50 17.92 100.00 14.77 264.58 264.58 |
| Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Operating interest Total direct expenses per acre Return over direct exp per acre | 58.72 68.84 38.71 9.14 11.22 15.89 4.12 4.55 211.20 53.39 |
| Overhead Expenses Hired labor Machinery 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 | 7.51 2.21 5.87 4.34 2.79 0.91 25.31 26.83 6.22 81.99 293.18 -28.60 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 9.26 -19.34 16.77 -36.10 |
| Cost of Production Total direct expense per cwt. Total dir & ovhd exp per cwt. Less govt & other income With labor & management Net value per unit Machinery cost per acre Est. labor hours per acre | 11.79 16.37 15.85 16.78 14.77 59.78 0.96 |

Canola on Cash Rent

| | Avg. Of All Farms |
|--|--|
| Number of farms | 7 |
| Acres Yield per acre (cwt.) Operators share of yield % Value per cwt. Total product return per acre Gross return per acre | 290.17 20.90 100.00 15.17 317.01 317.01 |
| Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Land rent Operating interest Total direct expenses per acre Return over direct exp per acre | 63.85 69.80 36.82 17.19 10.53 11.74 9.23 48.98 1.02 269.17 47.84 |
| Overhead Expenses Hired labor Machinery 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 | 7.76 0.71 3.47 3.08 0.66 1.18 30.35 4.71 51.91 321.08 -4.07 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 9.41 5.34 18.14 -12.80 |
| Cost of Production Total direct expense per cwt. Total dir & ovhd exp per cwt. Less govt & other income With labor & management Net value per unit Machinery cost per acre Est. labor hours per acre | 12.88 15.36 14.91 15.78 15.17 60.40 0.89 |
| | |

Corn on Owned Land

| | Avg. Of _All Farms | Low 20% | <u>40 - 60%</u> | High 20% |
|--|---|---|---|---|
| Number of farms | 39 | 7 | 8 | 8 |
| Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Hedging gains/losses per acre Crop insurance per acre Other crop income per acre Gross return per acre | 279.53 116.78 100.00 3.22 375.84 0.80 44.51 2.05 423.21 | 276.99 103.00 100.00 3.07 316.15 1.81 14.08 | 286.51 115.39 100.00 3.18 366.88 -0.18 17.30 0.15 384.16 | 359.89 121.59 100.00 3.32 403.97 - 130.90 7.34 542.21 |
| Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Drying expense Fuel & oil Repairs Custom hire Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 86.97 108.73 24.68 22.14 2.54 19.20 36.14 6.34 9.26 1.18 317.19 106.02 | 93.71 114.41 22.28 18.89 8.04 17.90 41.44 2.44 10.78 | 78.10 79.87 30.16 16.35 0.18 22.69 44.47 9.73 9.31 0.83 291.69 92.47 | 93.78 126.84 25.93 21.85 2.34 17.25 29.31 6.91 6.40 1.66 332.26 209.95 |
| Overhead Expenses Custom hire Hired labor Machinery 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 | 0.14 14.12 5.35 8.27 5.49 4.09 0.96 34.90 43.77 5.01 122.11 439.30 -16.08 | 0.81 5.92 0.38 9.01 6.53 3.44 0.53 45.26 46.66 6.40 124.93 454.82 -122.78 | 23.22 13.74 10.39 4.88 2.38 1.10 39.89 44.62 4.28 144.50 436.19 -52.03 | 9.55 0.65 7.35 5.22 4.10 0.83 31.58 41.87 4.68 105.82 438.08 104.13 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 15.17 -0.91 26.81 -27.72 | 11.36 -111.42 25.84 -137.26 | 14.81 -37.22 22.41 -59.63 | 15.10 119.23 28.62 90.62 |
| Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management | 2.72 3.76 3.23 3.46 | 3.20 4.42 4.15 4.40 | 2.53 3.78 3.50 3.70 | 2.73 3.60 2.34 2.58 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 3.23 111.02 1.67 | 3.09 106.49 1.37 | 3.18 135.97 1.80 | 3.32 96.03 1.63 |

Corn on Cash Rent

| | Avg. Of _All Farms | Low 20% | <u>40 - 60%</u> | High 20% |
|--|---|--|--|---|
| Number of farms | 49 | 9 | 10 | 10 |
| Acres Yield per acre (bu.) Operators share of yield % Value per bu. Other product return per acre Total product return per acre Hedging gains/losses per acre Crop insurance per acre Other crop income per acre Gross return per acre | 491.29 113.13 100.00 3.23 0.10 365.16 1.36 13.74 0.37 380.64 | 322.91 86.92 100.00 3.22 0.87 280.62 3.66 20.26 | 443.55 118.39 100.00 3.16 - 374.31 -0.49 8.02 0.63 382.47 | 569.34 132.74 100.00 3.20 - 425.34 - 3.66 - 429.00 |
| Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Drying expense Fuel & oil Repairs Custom hire Land rent Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 84.01 | 80.39 | 90.82 | 79.23 |
| | 106.31 | 109.06 | 102.88 | 95.04 |
| | 24.18 | 18.53 | 24.37 | 27.67 |
| | 18.16 | 18.47 | 16.77 | 16.53 |
| | 2.73 | 5.53 | 5.94 | 0.82 |
| | 18.12 | 18.48 | 20.36 | 18.76 |
| | 27.39 | 35.24 | 30.81 | 26.58 |
| | 3.76 | 6.72 | 3.71 | 1.75 |
| | 71.84 | 64.60 | 84.64 | 68.10 |
| | 8.01 | 14.46 | 9.16 | 5.12 |
| | 1.11 | 0.55 | 0.20 | 1.63 |
| | 365.60 | 372.05 | 389.66 | 341.23 |
| | 15.03 | -67.50 | -7.19 | 87.76 |
| Overhead Expenses Custom hire Hired labor Machinery 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 | 0.50 | 0.17 | 0.44 | 0.98 |
| | 13.57 | 9.51 | 13.65 | 14.12 |
| | 4.12 | 4.92 | 3.94 | 5.06 |
| | 4.61 | 5.44 | 2.88 | 4.43 |
| | 3.98 | 3.42 | 4.38 | 2.71 |
| | 1.48 | 2.13 | 0.88 | 2.26 |
| | 3.60 | 5.23 | 4.46 | 4.06 |
| | 49.59 | 53.25 | 43.81 | 48.69 |
| | 4.68 | 4.81 | 3.50 | 3.99 |
| | 86.14 | 88.88 | 77.93 | 86.30 |
| | 451.74 | 460.92 | 467.60 | 427.54 |
| | -71.11 | -156.38 | -85.13 | 1.46 |
| Government payments | 12.29 | 16.78 | 10.69 | 10.16 |
| Net return with govt pmts | -58.81 | -139.60 | -74.44 | 11.62 |
| Labor & management charge | 29.92 | 27.02 | 25.72 | 34.40 |
| Net return over lbr & mgt | -88.73 | -166.61 | -100.16 | -22.79 |
| Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management | 3.23 | 4.28 | 3.29 | 2.57 |
| | 3.99 | 5.30 | 3.95 | 3.22 |
| | 3.75 | 4.82 | 3.79 | 3.12 |
| | 4.01 | 5.14 | 4.01 | 3.38 |
| Net value per unit | 3.24 | 3.26 | 3.16 | 3.20 |
| Machinery cost per acre | 102.65 | 118.24 | 103.50 | 102.03 |
| Est. labor hours per acre | 1.63 | 1.76 | 1.64 | 1.65 |

Corn Silage on Owned Land

| | Avg. Of All Farms |
|---|---|
| Number of farms | 11 |
| Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Crop insurance per acre Gross return per acre | 53.55 13.90 100.00 31.06 431.73 19.97 451.71 |
| Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Machinery leases Operating interest Total direct expenses per acre Return over direct exp per acre | 85.47 100.85 18.63 19.36 20.17 33.41 34.95 3.09 10.27 326.20 125.51 |
| Overhead Expenses Hired labor Machinery leases Building 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 | 9.55 4.10 0.27 7.38 4.49 4.12 0.93 29.10 38.97 7.73 106.63 432.83 18.88 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 33.02 51.90 33.04 18.86 |
| Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management | 23.47 31.14 27.33 29.70 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 31.06 135.41 2.57 |

Corn Silage on Cash Rent

| | Avg. Of All Farms |
|--|---|
| Number of farms | 10 |
| Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Crop insurance per acre Gross return per acre | 139.12 14.17 100.00 29.51 418.19 5.43 423.62 |
| 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 | 76.69 88.09 29.58 16.61 19.47 34.76 37.53 76.92 6.28 0.42 386.34 37.28 |
| Overhead Expenses Hired labor Machinery 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 | 20.75 9.65 4.21 3.14 1.95 3.37 31.22 3.60 77.87 464.22 -40.60 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 16.29 -24.31 17.95 -42.25 |
| Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management | 27.27 32.76 31.23 32.49 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 29.51 132.68 1.64 |

CRP on Owned Land

| | Avg. Of All Farms |
|--|--|
| Number of farms | 13 |
| Acres Yield per acre (\$) Operators share of yield % Value per \$ Total product return per acre Gross return per acre | 214.89 51.94 100.00 1.00 51.94 51.94 |
| Direct Expenses Fuel & oil Repairs Total direct expenses per acre Return over direct exp per acre | 0.65 1.53 2.27 49.67 |
| Overhead Expenses RE & pers. property taxes Farm insurance Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre | 5.59 3.04 0.30 11.33 1.42 0.65 22.33 24.60 27.34 |

Hay, Alfalfa on Owned Land

| | Avg. Of All Farms |
|---|---|
| Number of farms | 11 |
| Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Gross return per acre | 84.11 2.71 100.00 61.66 167.33 167.33 |
| Direct Expenses Seed Fertilizer Crop insurance Fuel & oil Repairs Custom hire Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 0.35 2.33 1.91 10.27 18.68 2.19 4.30 0.16 40.21 127.13 |
| Overhead Expenses Hired labor Machinery 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 | 10.00 1.66 4.77 6.89 4.16 0.25 24.74 33.44 6.25 92.15 132.36 34.97 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 16.44 51.41 27.14 24.27 |
| Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management | 14.82 48.78 42.72 52.72 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 61.66 63.96 1.59 |

Hay, Alfalfa on Cash Rent

| | Avg. Of <u>All Farms</u> |
|---|---|
| Number of farms | 11 |
| Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Gross return per acre | 164.63 3.33 100.00 109.63 365.56 365.56 |
| Direct Expenses Seed Fertilizer Crop insurance Fuel & oil Repairs Custom hire Land rent Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 2.53 19.10 1.09 16.71 29.19 4.00 68.60 7.05 0.04 148.31 217.25 |
| Overhead Expenses Hired labor Machinery leases Building 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 | 15.07 9.12 0.22 4.52 2.42 1.57 3.12 31.64 3.34 71.02 219.34 146.22 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 11.74 157.96 17.94 140.03 |
| Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management | 44.48 65.78 62.26 67.63 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 109.63 88.89 1.58 |

Hay, Grass on Owned Land

| | Avg. Of All Farms |
|--|--|
| Number of farms | 7 |
| Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Gross return per acre | 191.53 1.31 100.00 43.70 57.36 57.36 |
| Direct Expenses Fuel & oil Repairs Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 7.99 14.41 3.31 1.28 27.00 30.36 |
| Overhead Expenses Hired labor Machinery leases RE & pers. property taxes Farm insurance Utilities Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre | 5.34 0.28 3.76 1.82 1.46 18.40 20.33 3.68 55.08 82.08 -24.72 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | -24.72 12.82 -37.54 |
| Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management | 20.57 62.53 62.53 72.30 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 43.70 42.96 1.20 |

Hay, Grass on Cash Rent

| | Avg. Of All Farms |
|--|---|
| Number of farms | 11 |
| Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Gross return per acre | 231.91 1.32 100.00 48.99 64.55 64.55 |
| Direct Expenses Crop chemicals Fuel & oil Repairs Land rent Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 0.74 9.12 15.13 19.48 2.90 1.71 49.08 15.48 |
| Overhead Expenses Hired labor 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 | 8.22 1.34 1.32 0.63 1.12 16.95 3.94 33.53 82.60 -18.05 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | -18.05 11.79 -29.85 |
| Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management Net value per unit | 37.24 62.68 62.68 71.64 48.99 |
| Machinery cost per acre Est. labor hours per acre | 41.37 1.27 |

Crop Enterprise Analysis

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Return)

Hay, Mixed Alfalfa/Grass on Owned Land

| | Avg. Of All Farms |
|---|--|
| Number of farms | 14 |
| Acres Yield per acre (ton) Operators share of yield % Value per ton Other product return per acre Total product return per acre Gross return per acre | 119.89 1.86 100.00 48.87 1.79 92.59 92.59 |
| Direct Expenses Fertilizer Crop insurance Fuel & oil Repairs Custom hire Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 7.67 0.51 7.56 14.50 2.14 2.41 0.03 34.83 57.77 |
| Overhead Expenses Custom hire Hired labor Machinery leases RE & pers. property taxes Farm insurance Utilities Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre | 1.07 5.83 0.56 5.07 4.47 4.20 14.73 15.17 6.30 57.40 92.23 0.37 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 13.79 14.16 16.38 -2.22 |
| Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management Net value per unit | 18.74 49.63 41.25 50.06 48.87 |
| Machinery cost per acre Est. labor hours per acre | 41.49 1.04 |

Crop Enterprise Analysis

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Return)

Hay, Mixed Alfalfa/Grass on Cash Rent

| | Avg. Of All Farms |
|--|--|
| Number of farms | 13 |
| Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Gross return per acre | 227.09 1.87 100.00 45.32 84.83 84.83 |
| Direct Expenses Seed Fertilizer Fuel & oil Repairs Custom hire Land rent Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 0.68 3.39 8.16 12.30 1.18 21.10 2.08 0.64 49.51 35.32 |
| Overhead Expenses Hired labor Machinery leases Farm insurance Utilities Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre | 2.62 0.46 3.19 2.75 1.96 13.88 5.41 30.26 79.78 5.06 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 5.75 10.81 13.54 -2.73 |
| Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management | 26.45 42.62 39.55 46.78 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 45.32 36.67 0.88 |

Pasture on Owned Land

| | Avg. Of All Farms | Low 20% | 40 - 60% | High 20% |
|------------------------------------|----------------------|-------------|----------|----------|
| | | | | |
| Number of farms | 28 | 5 | 5 | 6 |
| Acres | 807.50 | 119.00 | 322.30 | 512.28 |
| Yield per acre (aum) | 1.07 | 1.04 | 0.91 | 1.21 |
| Operators share of yield % | 100.00 | 100.00 | 100.00 | 100.00 |
| Value per aum | 30.55 | 21.40 | 25.52 | 26.24 |
| Total product return per acre | 32.54 | 22.20 | 23.15 | 31.75 |
| Crop insurance per acre | 0.17 | 0.27 | - | - |
| Gross return per acre | 32.71 | 22.47 | 23.15 | 31.75 |
| Direct Expenses | | | | |
| Fuel & oil | 0.49 | 1.53 | 0.47 | 0.41 |
| Repairs | 1.12 | 3.31 | 0.80 | 0.61 |
| Operating interest | 0.11 | 0.54 | 0.21 | 0.13 |
| Total direct expenses per acre | 2.28 | 5.96 | 1.47 | 1.52 |
| Return over direct exp per acre | 30.43 | 16.51 | 21.68 | 30.23 |
| Overhead Expenses | | | | |
| RE & pers. property taxes | 2.31 | 6.46 | 3.18 | 1.94 |
| Farm insurance | 0.65 | 1.37 | 0.33 | 0.11 |
| Utilities | 0.24 | 0.63 | 0.29 | 0.10 |
| Interest | 10.34 | 15.88 | 2.59 | 1.61 |
| Mach & bldg depreciation | 1.08 | 3.14 | 0.76 | 0.97 |
| Miscellaneous | 0.82 | 0.68 | 0.74 | 0.93 |
| Total overhead expenses per acre | 15.44 | 28.15 | 7.90 | 5.67 |
| Total dir & ovhd expenses per acre | 17.72 | 34.12 | 9.37 | 7.19 |
| Net return per acre | 14.99 | -11.65 | 13.78 | 24.56 |

Pasture on Cash Rent

| | Avg. Of All Farms | Low 20% | 40 - 60% | High 20% |
|------------------------------------|----------------------|---------|----------|----------|
| | All I dillis | | | |
| Number of farms | 35 | 7 | 7 | 7 |
| Acres | 1,006.09 | 608.57 | 1,069.04 | 1,048.49 |
| Yield per acre (aum) | 0.97 | 0.95 | 0.80 | 1.48 |
| Operators share of yield % | 100.00 | 100.00 | 100.00 | 100.00 |
| Value per aum | 24.15 | 23.61 | 24.70 | 26.31 |
| Total product return per acre | 23.52 | 22.37 | 19.67 | 38.90 |
| Crop insurance per acre | 0.30 | - | 1.39 | - |
| Gross return per acre | 23.82 | 22.37 | 21.06 | 38.90 |
| Direct Expenses | | | | |
| Crop chemicals | 0.29 | - | 0.71 | - |
| Crop insurance | 0.17 | - | 0.68 | 0.06 |
| Fuel & oil | 0.61 | 1.72 | 0.35 | 0.45 |
| Repairs | 0.89 | 2.41 | 0.75 | 0.72 |
| Land rent | 15.70 | 20.76 | 17.23 | 16.61 |
| Operating interest | 0.20 | 0.84 | 0.15 | 0.04 |
| Total direct expenses per acre | 17.94 | 25.73 | 20.22 | 17.87 |
| Return over direct exp per acre | 5.89 | -3.36 | 0.84 | 21.03 |
| Overhead Expenses | | | | |
| Machinery leases | 0.11 | 0.65 | 0.02 | 0.02 |
| Farm insurance | 0.42 | 1.56 | 0.11 | 0.17 |
| Utilities | 0.18 | 0.57 | 0.11 | 0.12 |
| Interest | 0.15 | 0.67 | 0.07 | 0.03 |
| Mach & bldg depreciation | 1.43 | 5.31 | 0.68 | 0.99 |
| Miscellaneous | 0.63 | 0.87 | 0.56 | 0.65 |
| Total overhead expenses per acre | 2.92 | 9.63 | 1.57 | 1.99 |
| Total dir & ovhd expenses per acre | 20.86 | 35.36 | 21.79 | 19.86 |
| Net return per acre | 2.97 | -13.00 | -0.73 | 19.05 |

Crop Enterprise Analysis

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2015 (Farms Sorted By Net Return)

Peas, Field on Cash Rent

| | Avg. Of All Farms |
|---|--|
| Number of farms | 5 |
| Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Crop insurance per acre Gross return per acre | 276.84 38.90 100.00 7.99 311.02 38.98 350.01 |
| 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 | 35.79 11.83 28.76 12.33 7.73 14.71 2.23 71.80 1.25 0.16 186.60 163.41 |
| Overhead Expenses Hired labor Machinery leases Building 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 | 16.16 10.77 0.41 3.38 5.71 0.18 1.49 21.82 5.67 65.59 252.19 97.81 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 14.87 112.69 15.83 96.86 |
| Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management | 4.80 6.48 5.10 5.50 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 7.99 57.27 1.16 |

Soybeans on Owned Land

| | Avg. Of _All Farms | Low 20% | 40 - 60% | High 20% |
|--|--|---|---|---|
| Number of farms | 40 | 8 | 8 | 8 |
| Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Hedging gains/losses per acre Crop insurance per acre Gross return per acre | 435.48 30.49 100.00 8.27 252.24 0.74 21.30 274.28 | 294.16 25.20 100.00 8.00 201.70 - 25.46 227.17 | 443.84 29.83 100.00 8.33 248.62 1.19 19.19 268.99 | 388.75 37.37 100.00 8.03 299.96 55.48 355.43 |
| Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 71.83 13.81 24.08 15.36 12.70 20.29 5.41 1.51 4.71 0.33 170.03 104.25 | 69.97 20.74 29.43 19.81 13.60 25.18 3.33 - 6.95 0.19 189.19 37.97 | 89.77 13.27 23.02 11.59 14.45 21.25 4.19 4.29 3.65 | 73.62 6.25 25.34 19.24 9.96 11.55 4.37 5.30 1.24 156.88 198.56 |
| Overhead Expenses Custom hire Hired labor Machinery 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 | 0.21 5.85 1.81 7.04 5.31 3.51 0.91 18.88 31.61 5.44 80.55 250.58 23.70 | 1.55 6.67 3.94 6.63 5.96 6.53 0.88 32.66 28.00 14.26 107.08 296.27 -69.11 | 8.07 0.24 6.95 4.22 3.48 0.67 9.65 31.87 3.53 68.68 254.16 14.83 | 1.21 0.62 6.84 5.66 1.47 0.61 29.46 40.93 5.00 91.80 248.68 106.75 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 12.13 35.83 21.49 14.34 | 24.30 -44.81 24.69 -69.50 | 10.78 25.61 21.71 3.91 | 10.42 117.17 23.86 93.31 |
| Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management | 5.58 8.22 7.10 7.80 | 7.51 11.76 9.78 10.76 | 6.22 8.52 7.48 8.20 | 4.20 6.66 4.89 5.53 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 8.30 74.73 1.12 | 8.00 75.30 1.33 | 8.37 76.15 1.14 | 8.03 66.55 1.09 |

Soybeans on Cash Rent

| | Avg. Of <u>All Farms</u> | Low 20% | <u>40 - 60%</u> | <u> High 20%</u> |
|--|--|---|---|--|
| Number of farms | 64 | 12 | 13 | 13 |
| Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Hedging gains/losses per acre Crop insurance per acre Gross return per acre | 1,017.03 | 1,259.92 | 1,077.35 | 802.03 |
| | 30.46 | 31.92 | 31.94 | 32.18 |
| | 100.00 | 100.00 | 100.00 | 100.00 |
| | 8.25 | 8.26 | 8.08 | 8.19 |
| | 251.18 | 263.62 | 258.23 | 263.59 |
| | 0.40 | - | 1.20 | - |
| | 16.86 | 5.52 | 15.02 | 38.36 |
| | 268.44 | 269.14 | 274.45 | 301.96 |
| Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Land rent Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 63.36 12.60 24.03 13.79 12.86 20.46 3.72 73.13 0.39 4.95 0.59 229.86 38.58 | 63.81 11.80 31.84 15.14 18.71 35.36 4.05 96.08 0.89 6.11 0.35 284.13 -15.00 | 71.40 12.45 23.69 14.22 13.18 18.43 6.78 66.67 0.20 3.41 | 61.52 14.74 24.07 12.50 10.27 13.17 0.05 64.71 0.10 5.09 1.48 207.70 94.26 |
| Overhead Expenses Hired labor Machinery 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 | 10.34 | 17.22 | 10.65 | 5.10 |
| | 2.60 | 4.75 | 0.94 | 1.56 |
| | 4.80 | 6.36 | 4.19 | 4.40 |
| | 3.34 | 4.57 | 3.59 | 1.54 |
| | 1.37 | 1.15 | 3.74 | 0.38 |
| | 3.64 | 7.77 | 1.34 | 3.99 |
| | 33.06 | 36.49 | 32.20 | 32.16 |
| | 4.51 | 4.78 | 4.35 | 4.25 |
| | 63.66 | 83.10 | 60.99 | 53.40 |
| | 293.52 | 367.23 | 291.40 | 261.10 |
| | -25.08 | -98.10 | -16.95 | 40.85 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 11.31 | 12.27 | 10.88 | 11.78 |
| | -13.78 | -85.82 | -6.07 | 52.63 |
| | 19.48 | 17.66 | 21.24 | 21.02 |
| | -33.26 | -103.48 | -27.31 | 31.61 |
| Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management | 7.55 | 8.90 | 7.21 | 6.45 |
| | 9.64 | 11.51 | 9.12 | 8.11 |
| | 8.70 | 10.95 | 8.27 | 6.56 |
| | 9.34 | 11.50 | 8.94 | 7.21 |
| Net value per unit | 8.26 | 8.26 | 8.12 | 8.19 |
| Machinery cost per acre | 74.26 | 105.90 | 71.34 | 57.81 |
| Est. labor hours per acre | 1.07 | 1.29 | 1.16 | 0.96 |

Sunflowers on Owned Land

| | Avg. Of All Farms |
|--|---|
| Number of farms | 8 |
| Acres Yield per acre (cwt.) Operators share of yield % Value per cwt. Total product return per acre Crop insurance per acre Gross return per acre | 118.13 17.54 100.00 18.90 331.47 0.39 331.86 |
| 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 | 34.48 53.53 36.25 13.46 13.90 27.02 16.35 4.10 1.92 201.01 130.85 |
| Overhead Expenses Hired labor Machinery leases RE & pers. property taxes Farm insurance Utilities Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre | 6.49 3.34 6.55 5.81 3.80 23.06 31.79 4.74 85.57 286.58 45.28 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 13.89 59.17 24.46 34.71 |
| Cost of Production Total direct expense per cwt. Total dir & ovhd exp per cwt. Less govt & other income With labor & management | 11.46 16.34 15.53 16.92 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 18.90 90.71 1.23 |

Sunflowers on Cash Rent

| | Avg. Of All Farms |
|--|---|
| Number of farms | 9 |
| Acres Yield per acre (cwt.) Operators share of yield % Value per cwt. Total product return per acre Crop insurance per acre Gross return per acre | 328.36 16.20 100.00 20.21 327.36 5.20 332.55 |
| 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 | 31.97 60.84 37.80 14.25 16.61 15.42 11.07 63.28 3.60 3.26 258.09 74.46 |
| Overhead Expenses Hired labor Machinery 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 | 5.95 5.02 4.33 3.87 0.41 0.69 36.13 4.80 61.19 319.29 13.27 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 16.06 29.33 22.97 6.36 |
| Cost of Production Total direct expense per cwt. Total dir & ovhd exp per cwt. Less govt & other income With labor & management | 15.93 19.71 18.40 19.82 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 20.21 79.93 1.04 |

Wheat, Spring on Owned Land

| | Avg. Of _All Farms | Low 20% | 40 - 60% | High 20% |
|---|--|--|---|--|
| Number of farms | 35 | 7 | 7 | 7 |
| Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Hedging gains/losses per acre Crop insurance per acre Gross return per acre | 346.50 59.26 100.00 4.76 282.17 0.79 5.11 288.07 | 231.44 53.02 100.00 4.80 254.59 -0.54 3.02 257.08 | 420.86 57.54 100.00 4.65 267.32 3.14 0.13 270.59 | 359.58 64.21 100.00 4.86 311.73 4.85 316.58 |
| Direct Expenses Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 18.15 76.03 29.45 14.84 11.42 19.76 9.97 0.86 5.17 1.27 186.94 101.13 | 15.95 78.52 36.81 20.03 12.33 28.50 4.63 - 6.77 3.25 206.79 50.29 | 20.09 74.56 26.84 13.99 9.92 19.92 13.17 - 8.01 | 17.63 66.24 29.07 11.62 13.32 14.33 2.99 0.70 0.16 156.07 160.51 |
| Overhead Expenses Hired labor Machinery 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 | 6.80 | 2.48 | 7.73 | 5.83 |
| | 1.40 | 1.51 | 1.74 | 0.53 |
| | 5.60 | 6.62 | 5.46 | 5.63 |
| | 4.19 | 4.28 | 4.10 | 3.84 |
| | 3.02 | 2.22 | 3.16 | 2.23 |
| | 0.66 | 0.21 | 1.13 | 1.33 |
| | 22.90 | 75.02 | 21.49 | 6.26 |
| | 28.76 | 19.99 | 25.61 | 32.73 |
| | 5.02 | 4.77 | 3.15 | 6.48 |
| | 78.35 | 117.10 | 73.58 | 64.85 |
| | 265.28 | 323.89 | 260.08 | 220.92 |
| | 22.79 | -66.82 | 10.51 | 95.66 |
| Government payments | 9.04 | 8.88 | 6.49 | 9.00 |
| Net return with govt pmts | 31.83 | -57.94 | 17.01 | 104.66 |
| Labor & management charge | 19.86 | 18.38 | 15.09 | 21.91 |
| Net return over lbr & mgt | 11.97 | -76.32 | 1.92 | 82.75 |
| Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management | 3.15 | 3.90 | 3.24 | 2.43 |
| | 4.48 | 6.11 | 4.52 | 3.44 |
| | 4.22 | 5.89 | 4.35 | 3.23 |
| | 4.56 | 6.24 | 4.61 | 3.57 |
| Net value per unit | 4.78 | 4.79 | 4.70 | 4.86 |
| Machinery cost per acre | 72.40 | 70.36 | 71.20 | 61.52 |
| Est. labor hours per acre | 1.05 | 0.98 | 0.77 | 1.12 |

Wheat, Spring on Cash Rent

| | Avg. Of | | | |
|---|--|---|---|--|
| | All Farms | Low 20% | <u>40 - 60%</u> | <u> High 20%</u> |
| Number of farms | 52 | 10 | 11 | 11 |
| Acres Yield per acre (bu.) Operators share of yield % Value per bu. Other product return per acre Total product return per acre Hedging gains/losses per acre Crop insurance per acre Gross return per acre | 667.96 57.17 100.00 4.89 0.19 279.63 1.11 9.27 290.00 | 355.09 42.93 100.00 4.77 204.91 1.26 206.17 | 1,188.42 58.88 100.00 4.96 291.86 2.14 16.53 310.53 | 282.78 65.37 100.00 5.03 2.07 330.85 3.19 334.04 |
| Direct Expenses | | | | |
| Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Land rent Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre | 18.70 81.16 30.74 14.51 10.66 16.95 5.04 60.73 0.29 4.99 1.20 244.96 45.04 | 17.85 81.49 34.42 10.71 11.03 18.40 1.57 81.24 1.36 4.29 0.30 262.66 -56.49 | 17.64 91.85 30.92 15.87 9.26 18.72 7.20 63.13 5.32 1.61 261.52 49.01 | 15.71 72.88 30.80 12.69 12.70 10.21 3.39 48.51 - 1.51 0.06 208.45 125.58 |
| Overhead Expenses Hired labor Machinery leases Building 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 | 8.91 2.20 0.24 4.11 3.22 0.59 2.81 29.24 5.35 56.67 301.62 -11.63 | 8.19 2.44 0.12 3.94 2.19 0.82 5.83 27.62 3.38 54.53 317.19 -111.02 | 10.47 3.14 0.58 4.41 4.36 0.14 2.17 27.85 4.19 57.31 318.83 -8.30 | 7.89 0.17 0.02 4.33 3.55 1.20 1.05 34.06 4.66 56.93 265.39 68.65 |
| Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt | 10.20 -1.42 19.13 -20.55 | 14.16 -96.86 20.20 -117.06 | 11.40 3.10 18.87 -15.77 | 8.44 77.09 20.62 56.48 |
| Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management | 4.28 5.28 4.91 5.25 | 6.12 7.39 7.03 7.50 | 4.44 5.41 4.90 5.22 | 3.19 4.06 3.85 4.17 |
| Net value per unit Machinery cost per acre Est. labor hours per acre | 4.91 64.80 0.97 | 4.77 67.37 1.14 | 4.99 65.43 0.90 | 5.03 58.85 1.23 |

EXPLANATORY NOTES FOR LIVESTOCK TABLES

The "Livestock Enterprise Analysis" table shows the average physical production, gross returns, direct costs, overhead costs, and net return per unit. All costs are actual costs; no opportunity costs are included. The "Net Return" to the enterprise is the "Gross Margin" minus the direct and overhead costs. "Net Return" represents the return to the operators and family's unpaid labor, management, and equity. It represents the return to all of the resources, which are owned by the farm family and hence, not purchased or paid a wage. The last section of each livestock table contains both economic and technical efficiency measures, which are particularly useful to individual managers in assessing their performance as compared to their peers.

When there are less than five farms with a particular livestock enterprise, that enterprise is not included in the report. When there is a sufficient number (i.e., more than 24), farms are divided into low 20%, middle 20% and high 20% on the basis of returns to overhead costs. The classification is done separately for each livestock enterprise.

The "Dairy" enterprise contains the information for only the milking herd (which includes dry cows). "Dairy Replacement Heifers" are those heifers kept for replacement into the milking herd. "Dairy Heifers (for sale)" are heifers intended for feeding and sale. "Dairy Steers" includes only steers for feeding. The "Dairy and Replacement Heifers" table includes both "Dairy" and "Dairy Replacement Heifers."

"Lbs. feed per lb. of gain" is the lbs. of total feed divided by total gain. The total feed is calculated by adding total pounds of feed. For grains, these pounds per unit are used: corn, 56; oats, 32; barley, 48; grain sorghum, 56; wheat, 60; and millet, 48. For these roughages, the pounds are calculated by these factors: alfalfa haylage, 0.5; corn silage, 0.33; oatlage, 0.5; and sorghum silage, 0.33; and small grain silage, 0.33.

The calving and weaning percentages are calculated as the number of calves, which are calved and weaned, respectively, divided by the number of cows, which are supposed to bear young.

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

Beef Cow-Calf -- Average Per Cwt. Produced

| <u>-</u> | Avg. O All Farn | | Low 20 | 0% | 40 - 60 | % | High 2 | 0% |
|---|--|--|---|---|---|---|---|---|
| Number of farms | | 25 | | 5 | | 5 | | 5 |
| Beef Calves sold (lb) Transferred out (lb) Cull sales (lb) Other income Purchased (lb) Transferred in (lb) Inventory change (lb) Gross margin | Quantity 22.93 77.07 | Value 44.31 139.85 34.88 2.45 -38.18 -45.69 32.12 170.36 | Quantity 17.86 82.14 | Value 30.24 165.86 46.29 2.00 -17.75 -55.01 -1.61 175.05 | Quantity 36.09 63.91 | Value 66.54 105.84 25.43 1.02 -19.37 -34.27 10.63 155.83 | Quantity 22.87 77.13 | Value 48.75 152.85 49.40 5.45 -47.01 -49.29 38.32 198.46 |
| Direct Expenses Protein Vit Minerals (lb.) Creep / Starter (lb.) Complete Ration (lb.) Corn Silage (lb.) Hay, Grass (lb.) Pasture (aum) Other feed stuffs (lb) Veterinary Supplies Fuel & oil Repairs Custom hire Livestock leases Marketing Operating interest Total direct expenses Return over direct expense | 14.30 22.14 120.60 314.69 860.14 1.37 151.87 | 4.25 2.14 4.30 5.24 20.82 28.06 4.68 6.01 2.21 3.91 6.16 3.05 0.45 0.99 1.78 94.07 76.29 | 9.38 - - 548.30 850.36 2.23 57.33 | 4.44 8.22 21.34 56.62 2.47 4.55 0.57 4.20 6.94 2.16 3.61 4.58 2.26 121.97 53.07 | 24.13 48.73 185.62 208.82 1,264.54 1.00 58.54 | 5.55 5.10 7.89 2.61 29.96 23.71 2.15 5.13 0.08 3.11 6.73 8.61 0.77 0.54 101.95 53.88 | 4.22 32.53 161.10 462.27 779.46 1.27 126.17 | 1.31 2.76 5.32 8.92 21.32 21.32 3.46 4.05 2.13 4.74 6.69 1.25 |
| Overhead Expenses Hired labor Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses Total dir & ovhd expenses Net return | | 3.43 2.32 1.86 0.51 1.83 7.34 3.10 20.40 114.47 55.89 | | 2.30 4.23 2.46 0.04 2.01 8.86 2.65 22.56 144.54 30.51 | | 4.09 1.56 2.63 0.86 6.78 2.40 18.33 120.28 35.55 | | 5.99 2.05 2.08 1.30 1.90 6.39 3.27 22.98 108.60 89.86 |
| Labor & management charge Net return over lbr & mgt | | 11.72 44.16 | | 14.39 16.12 | | 9.44 26.10 | | 10.99 78.87 |
| Cost of Production Per Cwt. Product Total direct expense per unit Total dir& ovhd expense per unit With other revenue adjustments With labor and management | ed | 94.07 114.47 128.95 140.67 | | 121.97 144.54 166.99 181.38 | | 101.95 120.28 137.86 147.30 | | 85.62 108.60 111.99 122.98 |
| Est. labor hours per unit | | 0.81 | | 0.80 | | 0.78 | | 0.90 |
| Other Information Number of cows Pregnancy percentage Pregnancy loss percentage Culling percentage Calving percentage Weaning percentage Calves sold per cow Calf death loss percent Cow death loss percent Average weaning weight Lb. weaned/exposed female Feed cost per cow Avg wgt/ Beef Calves sold Avg price / cwt. | | 200.3 95.3 1.0 13.5 94.3 89.4 0.92 4.9 1.9 565 505 364.90 575 193.27 | | 177.5 77.7 0.1 13.9 77.6 71.8 0.73 7.1 1.6 511 367 345.50 607 169.29 | | 143.0 98.8 1.5 10.2 97.3 92.9 0.95 4.4 1.1 617 573 463.94 617 184.39 | | 294.2 99.1 0.5 19.8 98.6 94.3 1.00 4.9 2.1 574 541 367.00 562 213.18 |

Beef Cow-Calf -- Average Per Cow

| _ | Avg. C All Far | | Low 2 | 0% | 40 - 60 | 9% | High 2 | 0% |
|---|--|--|--|--|---|---|--|--|
| Number of farms | | 25 | | 5 | | 5 | | 5 |
| Beef Calves sold (lb) Transferred out (lb) Cull sales (lb) Other income Purchased (lb) Transferred in (lb) Inventory change (lb) Gross margin | Quantity 120.4 404.7 | Value 232.65 734.24 183.11 12.87 -200.48 -239.90 168.65 894.46 | Quantity 66.3 304.8 | Value 112.22 615.57 171.79 7.44 -65.87 -204.17 -5.98 649.66 | Quantity 217.5 385.2 | Value 401.11 637.98 153.28 6.15 -116.76 -206.57 64.10 939.30 | Quantity 130.3 439.4 | Value 277.73 870.73 281.40 31.02 -267.78 -280.80 218.29 1,130.59 |
| Direct Expenses Protein Vit Minerals (lb.) Creep / Starter (lb.) Complete Ration (lb.) Corn Silage (lb.) Hay, Grass (lb.) Pasture (aum) Other feed stuffs (lb) Veterinary Supplies Fuel & oil Repairs Custom hire Livestock leases Marketing Operating interest Total direct expenses Return over direct expense | 75.1 116.2 633.2 1,652.2 4,516.1 7.2 797.4 | 22.31 11.26 22.59 27.51 109.33 147.33 24.56 31.55 11.63 20.54 32.35 16.01 2.38 5.22 9.34 493.92 400.54 | 34.8 - - 2,034.9 3,155.9 8.3 212.8 | 16.49 30.52 79.21 210.12 9.16 16.90 2.13 15.58 25.74 8.02 13.41 17.01 8.38 452.68 196.98 | 145.5 293.7 1,118.9 1,258.7 7,622.4 6.0 352.9 | 33.45 30.77 47.55 15.73 180.59 142.90 12.94 30.90 0.51 18.77 40.58 51.90 4.67 3.27 614.54 324.76 | 24.0 185.3 917.7 2,633.4 4,440.4 7.3 718.8 | 7.44 15.75 30.32 50.84 121.46 19.72 23.06 12.11 27.01 38.13 7.11 3.65 9.70 487.77 642.81 |
| Overhead Expenses Hired labor Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses Total dir & ovhd expenses Net return | | 18.03 12.21 9.77 2.67 9.62 38.55 16.25 107.10 601.02 293.43 | | 8.54 15.71 9.14 0.16 7.48 32.89 9.82 83.74 536.42 113.24 | | 24.66 9.42 15.85 5.19 40.88 14.50 110.50 725.03 214.26 | | 34.13 11.67 11.84 7.39 10.85 36.38 18.66 130.91 618.68 511.91 |
| Labor & management charge Net return over lbr & mgt | | 61.56 231.87 | | 53.42 59.81 | | 56.92 157.34 | | 62.62 449.29 |
| Cost of Production Per Cwt. Product Total direct expense per unit Total dir& ovhd expense per unit With other revenue adjustments With labor and management | ed | 94.07 114.47 128.95 140.67 | | 121.97 144.54 166.99 181.38 | | 101.95 120.28 137.86 147.30 | | 85.62 108.60 111.99 122.98 |
| Est. labor hours per unit | | 4.23 | | 2.96 | | 4.73 | | 5.12 |
| Other Information Number of cows Pregnancy percentage Pregnancy loss percentage Culling percentage Calving percentage Weaning percentage Calves sold per cow Calf death loss percent Cow death loss percent Average weaning weight Lb. weaned/exposed female Feed cost per cow Avg wgt/ Beef Calves sold Avg price / cwt. | | 200.3 95.3 1.0 13.5 94.3 89.4 0.92 4.9 1.9 565 505 364.90 575 193.27 | | 177.5 77.7 0.1 13.9 77.6 71.8 0.73 7.1 1.6 511 367 345.50 607 169.29 | | 143.0 98.8 1.5 10.2 97.3 92.9 0.95 4.4 1.1 617 573 463.94 617 184.39 | | 294.2 99.1 0.5 19.8 98.6 94.3 1.00 4.9 2.1 574 541 367.00 562 213.18 |

Beef Cow-Calf Whole Herd w/backgrounding -- Average Per Cwt. Produced

| | Avg. All Fa | |
|--|--|---|
| Number of farms | | 14 |
| Beef Calves sold (lb) Transferred out (lb) Cull sales (lb) Other income Purchased (lb) Transferred in (lb) Inventory change (lb) Gross margin | Quantity 61.63 20.42 | Value 130.05 35.64 25.06 0.83 -18.52 -11.55 17.39 178.90 |
| Direct Expenses Beet Pulp (dry) (lb.) Protein Vit Minerals (lb.) Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass (lb.) Oats (bu.) Pasture (aum) Stover (lb.) Straw (lb.) DDGS, dry (lb.) DDGS, wet (lb.) Other feed stuffs (lb) Veterinary Supplies Fuel & oil Repairs Custom hire Total direct expenses Return over direct expense | 91.85 40.67 0.78 1,062.84 218.92 742.03 0.66 0.90 70.63 116.86 84.01 32.98 89.99 | 1.65 9.48 2.40 16.02 7.95 19.42 1.49 20.29 1.38 2.48 3.19 1.32 4.37 6.58 6.35 6.20 10.36 4.24 125.17 53.73 |
| Overhead Expenses Hired labor Farm insurance Mach & bldg depreciation Miscellaneous Total overhead expenses Total dir & ovhd expenses Net return | | 3.19 2.60 9.58 7.34 22.70 147.88 31.02 |
| Labor & management charge Net return over lbr & mgt | | 11.22 19.81 |
| Cost of Production Per Cwt. Produced Total direct expense per unit Total dir& ovhd expense per unit With other revenue adjustments With labor and management | | 125.17 147.88 133.57 144.79 |
| Est. labor hours per unit | | 0.99 |
| Other Information Number of cows Pregnancy percentage Pregnancy loss percentage Culling percentage Calving percentage Weaning percentage Calves sold per cow Calf death loss percent Cow death loss percent Average weaning weight Lb. weaned/exposed female Feed cost per cow Avg wgt/ Beef Calves sold Avg price / cwt. | | 128.1 96.2 5.0 9.0 91.4 85.5 0.61 6.4 1.7 501 429 460.80 690 211.02 |

Beef Cow-Calf Whole Herd w/backgrounding -- Average Per Cow

| | Avg. (All Fai | |
|--|--|---|
| Number of farms | | 14 |
| Beef Calves sold (lb) Transferred out (lb) Cull sales (lb) Other income Purchased (lb) Transferred in (lb) Inventory change (lb) Gross margin | Quantity 310.6 102.9 | Value 655.42 179.64 126.31 4.18 -93.35 -58.23 87.63 901.61 |
| Direct Expenses Beet Pulp (dry) (lb.) Protein Vit Minerals (lb.) Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass (lb.) Oats (bu.) Pasture (aum) Straw (lb.) DDGS, dry (lb.) DDGS, wet (lb.) Other feed stuffs (lb) Veterinary Supplies Fuel & oil Repairs Custom hire Total direct expenses Return over direct expense | 462.9 205.0 3.9 5,356.4 1,103.3 3,739.6 3.3 4.5 589.0 423.4 166.2 809.5 | 8.30 47.77 12.08 80.73 40.07 97.88 7.53 102.26 12.52 16.08 6.64 28.96 33.17 32.01 31.27 52.21 21.39 630.84 270.77 |
| Overhead Expenses Hired labor Farm insurance Utilities Mach & bldg depreciation Miscellaneous Total overhead expenses Total dir & ovhd expenses Net return | | 16.09 13.09 10.83 48.27 26.14 114.42 745.26 156.35 |
| Labor & management charge Net return over lbr & mgt | | 56.52 99.83 |
| Cost of Production Per Cwt. Produced Total direct expense per unit Total dir& ovhd expense per unit With other revenue adjustments With labor and management | | 125.17 147.88 133.57 144.79 |
| Est. labor hours per unit | | 4.97 |
| Other Information Number of cows Pregnancy percentage Pregnancy loss percentage Culling percentage Calving percentage Weaning percentage Weaning percentage Calves sold per cow Calf death loss percent Cow death loss percent Average weaning weight Lb. weaned/exposed female Feed cost per cow Avg wgt/ Beef Calves sold Avg price / cwt. | | 128.1 96.2 5.0 9.0 91.4 85.5 0.61 6.4 1.7 501 429 460.80 690 211.02 |

Beef Replacement Heifers -- Average Per Head Sold/Trans

| | Avg. Of All Farms | | |
|---|--|--|--|
| Number of farms | | 18 | |
| Beef Replace sold (hd) Transferred out (hd) Cull sales (hd) Other income | Quantity 0.1 0.9 0.0 | Value 239.93 1,635.05 3.13 | |
| Purchased (hd) Transferred in (hd) Inventory change (hd) Gross margin | 0.2 0.5 -0.3 | -334.81 -744.36 -440.77 358.17 | |
| Pirect Expenses Protein Vit Minerals (lb.) Complete Ration (lb.) Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass (lb.) Pasture (aum) DDGS, dry (lb.) Other feed stuffs (lb) Breeding fees Veterinary Supplies Fuel & oil Repairs Custom hire Marketing Bedding Operating interest Total direct expenses Return over direct expense | 53.9 338.4 4.8 2,040.2 375.6 1,827.0 5.0 286.9 196.3 | 10.55 11.72 14.17 37.68 11.73 51.43 92.08 18.54 2.61 9.10 19.22 4.64 5.33 6.58 8.64 0.91 3.66 1.13 309.74 48.43 | |
| Overhead Expenses Hired labor Farm insurance Utilities Dues & professional fees Mach & bldg depreciation Miscellaneous Total overhead expenses Total dir & ovhd expenses Net return | | 7.14 3.63 2.53 2.50 11.25 5.21 32.26 342.00 16.17 | |
| Labor & management charge Net return over lbr & mgt | | 16.71 -0.54 | |
| Est. labor hours per unit | | 1.05 | |
| Other Information No. purchased or trans in Number sold or trans out Average number of head Percentage death loss Feed cost per average head Feed cost/head sold/trans | | 50 66 62 0.3 264.29 250.51 | |

Figure 1. Gross Cash Income Per Farm

N.D. Farm Business Management Education Program – South Central Region

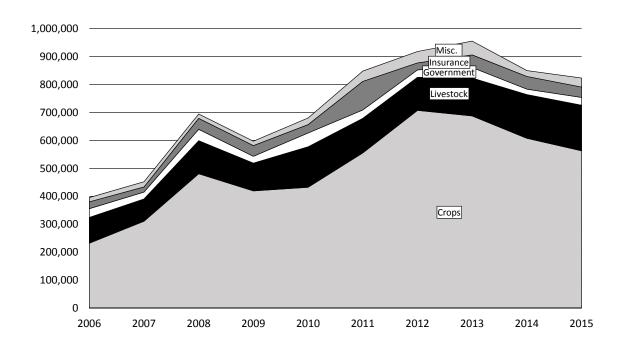


Figure 2. Net Farm Income (Accrual) Per Farm

N.D. Farm Business Management Education Program - South Central Region

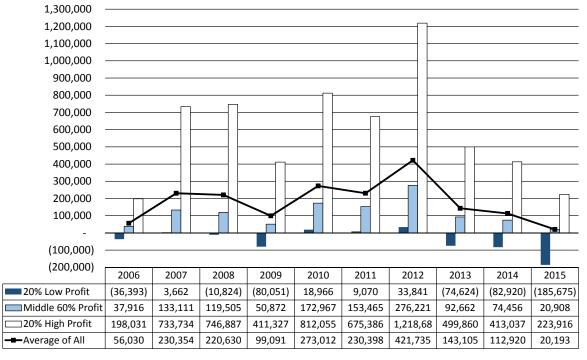


Figure 3. Financial Efficiency Measures (As Percent of Gross Revenue)

N.D. Farm Business Management Education Program – South Central Region

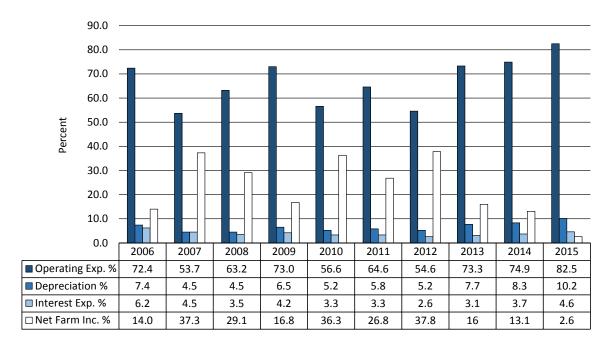


Figure 4. Profitability Measures Per Farm

N.D. Farm Business Management Education Program – South Central Region

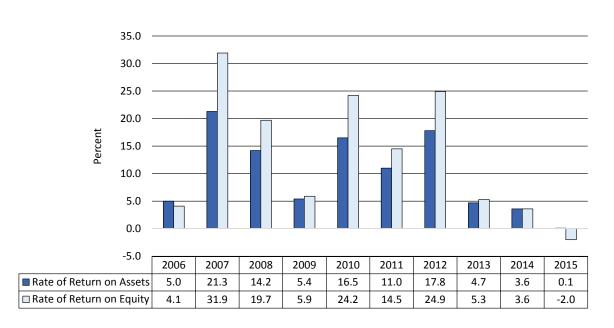


Figure 5. Assets and Liabilities Per Farm, 2015

N.D. Farm Business Management Education Program – South Central Region

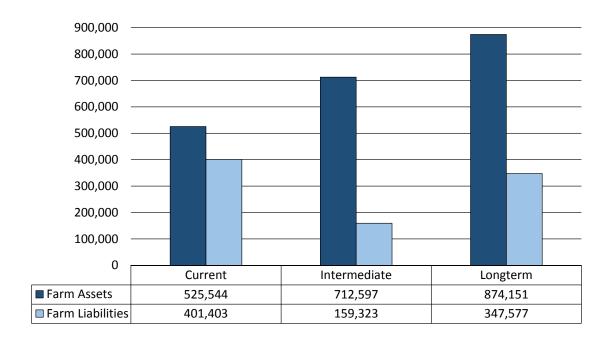


Figure 6. Total Farm Assets and Liabilities

N.D. Farm Business Management Education Program – South Central Region

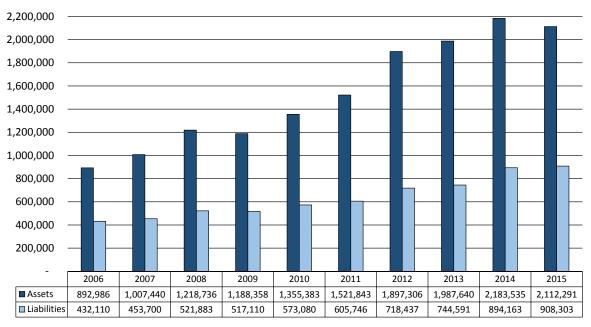


Figure 7. Household and Personal Expenses

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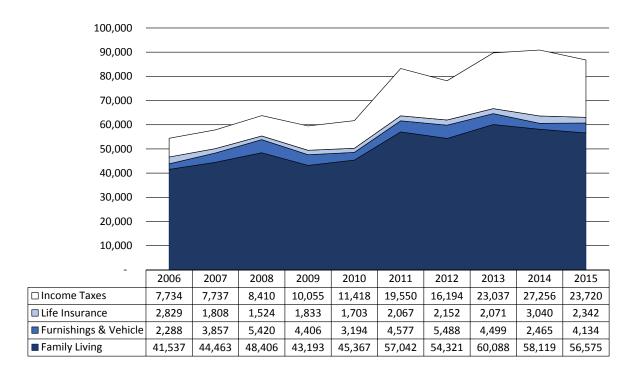


Figure 8. Crop Acreage Per Farm

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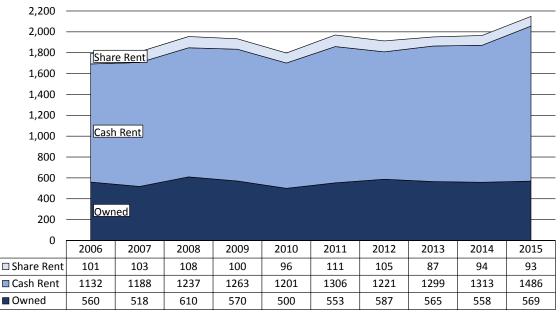


Figure 9. Spring Wheat Costs Per Acre

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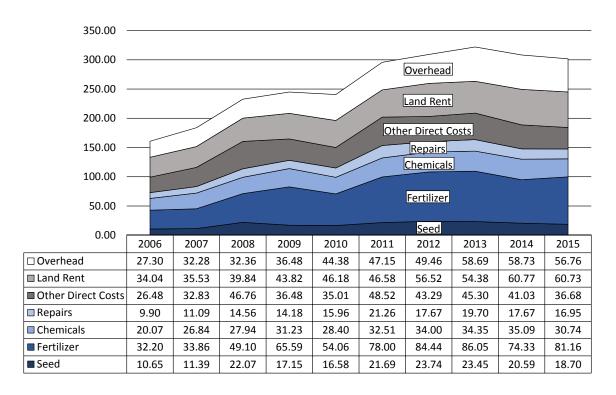
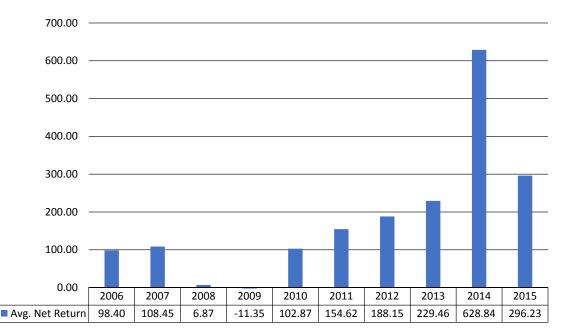


Figure 10. Average Net Return Per Beef Cow

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