2018 ANNUAL REPORT South Central North Dakota

North Dakota Farm and Ranch Business

Management Education





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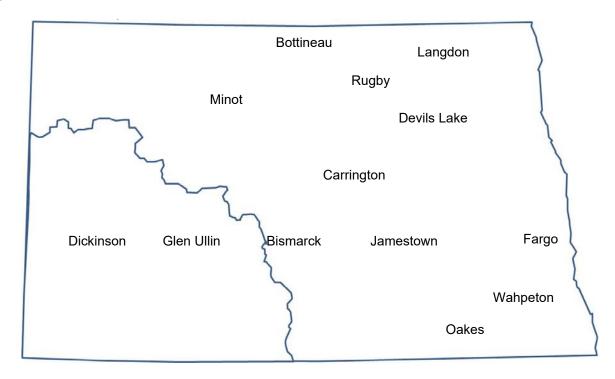
NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

REGION 3 – SOUTH CENTRAL AVERAGES 2018 ANNUAL REPORT

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

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Jamestown (JVCTC)	. Virgil Dagman
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This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2018 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.



2018 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 2018 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 30th 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 income statement is a table which lists <u>cash</u> farm income. There are several sources of cash farm income. Cash sales of crops are listed first followed by cash sales of livestock.

Government payments are categorized. "Crop government payments" are Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC) payments. "LDP payments" are loan deficiency payments that may be received on production when local prices are below the county loan rate for the crop. "Livestock government payments" include dairy MPP payments and other livestock related payments. "CRP payments" are funds received for land enrolled in the Conservation Reserve Program. "Other government payments" refers to all other government payments such as disaster payments, EQIP, CSP, and Market Facilitation Payments (MFP).

Lastly, cash income is categorized by sources such as custom work, cash patronage dividends, crop and property insurance indemnities, sale of resale items, and other.

The second section of the income statement lists <u>cash</u> expenses. "Hired labor" includes only labor which was hired and paid. "Interest" includes only interest actually paid. No opportunity charges on farm equity capital or unpaid labor are included.

The difference between "Gross Cash Farm Income" and "Total cash expense" is the "Net cash farm income." This is net farm income on a <u>cash</u> 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 operators and family's unpaid labor, management, and equity capital (net worth). In other words, it represents the return to all of the resources that are owned by the farm family and hence, not purchased or paid a wage. However, it does not include any debt forgiveness or asset repossessions.

Inventory Changes

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

Depreciation

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

Profitability Measures

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

- "Rate of return on assets" is the "Return on farm assets" divided by "Average farm assets."
- "Rate of return on equity "is the "Return of farm equity" divided by "Average farm equity."
- "Operating profit margin" is the "Return on farm assets" divided by "Value of farm production."
- "Asset turnover rate" is the "Value of farm production" divided by "Average farm assets."
- **"Farm interest expense"** is the accrual interest cost, usually it will be different from the cash interest expense.
- "Value of operator's labor and management" is an opportunity cost for unpaid operator's labor and management that is used in the calculation of several financial performance measures. A value of \$25,000 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 <u>Amortization</u>. This represents a measure of earnings available for debt repayment.</u>

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, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	108	21	21	22
Cash Farm Income				
Barley	13,727	-	20,354	41,814
Beans, Black Turtle	1,942	-	6,613	3,223
Beans, Navy	1,811	-	-	8,567
Beans, Pinto	35,059	17,970	61,928	75,801
Canola	9,797	-	4,402	36,800
Corn	175,517	94,809	229,211	369,880
Oats	253	-	1,142	152
Peas, Field	4,396	-	13,660	7,020
Rye	827	2,229	-	1,732
Soybeans	240,017	122,699	207,297	553,751
Sunflowers	6,303	364	-	30,594
Sunflowers, Confectionary	1,169	-	6,013	-
Wheat, Durum	10,400	220	-	50,845
Wheat, Spring	91,310	73,291	45,447	230,075
Wheat, Winter	739	-	342	3,300
Rented Out	859	2,001	179	1,231
Miscellaneous crop income	2,063	1,932	-	4,062
Beef Cow-Calf, Beef Calves	41,846	20,587	56,366	43,828
Beef Replacement Heifers	2,835	-	· -	8,017
Beef Backgrounding	15,240	18,911	-	23,712
Beef Finishing	21,281	71,131	7,538	6,221
Other Beef Income	3,341	-	· -	15,964
Dairy, Milk	31,579	-	162,404	, -
Other Dairy Income	771	-	3,967	-
Sheep, Market Lamb Prod, Mkt Lambs	306	523	-	-
Cull breeding livestock	6,000	4,504	11,743	6,784
Misc. livestock income	[,] 81	196	, - -	-
Crop government payments	24,696	20,020	22,022	61,759
CRP payments	1,721	2,543	1,167	372
Other government payments	33,271	19,997	46,585	61,344
Custom work income	37,493	143,363	27,365	7,713
Patronage dividends, cash	2,759	736	7,285	2,849
Crop insurance income	34,878	16,424	27,179	104,908
Property insurance income	5,970	3,466	1,957	20,476
Livestock insurance inc	119	33	581	-
Other farm income	18,265	24,289	19,825	20,790
Gross Cash Farm Income	878,646	662,236	992,572	1,803,585

Farm Income Statement (continued) North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of			
	All Farms	Low 20%	<u>40 - 60%</u>	High 20%
Number of farms	108	21	21	22
Cash Farm Expense				
Seed and plants	94,957	61,014	89,358	205,720
Fertilizer	87,603	47,007	93,289	196,202
Crop chemicals	54,786	34,068	61,284	115,299
Crop insurance	27,226	15,562	25,359	64,636
Drying expense	2,762	1,951	3,186	3,667
Storage	656	120	2,340	747
Irrigation energy	627	-	1,088	447
Crop miscellaneous	1,530	2,924	1,324	1,108
Crop consultants	1,661	238	2,145	4,880
Feeder livestock purchase	30,204	98,066	6,890	11,454
Purchased feed	38,088	96,947	61,407	14,367
Breeding fees	859	-	2,280	789
Veterinary	4,400	2,857	10,256	3,091
Supplies	4,329	8,972	10,269	1,920
Other livestock expense	141	-	727	-
Interest	44,492	47,833	54,084	68,793
Fuel & oil	35,815	37,991	37,565	63,043
Repairs	56,061	52,112	65,110	92,645
Custom hire	16,400	12,244	20,258	22,381
Hired labor	41,477	56,678	74,144	63,150
Land rent	113,944	89,341	139,257	236,157
Machinery leases	10,712	10,424	12,891	21,342
Building leases	854	546	676	1,556
Real estate taxes	4,328	3,826	3,261	3,721
Farm insurance	14,003	11,973	14,133	27,899
Utilities	10,740	8,553	15,309	17,478
Hauling and trucking	2,182	-	11,221	-
Marketing	1,373	641	2,939	767
Dues & professional fees	3,873	2,646	2,721	11,063
Purchase of resale items	1,771	3,502	-	-
Miscellaneous	12,837	15,168	14,832	24,185
Total cash expense	720,695	723,205	839,602	1,278,508
Net cash farm income	157,951	-60,968	152,970	525,077
Inventory Changes				
Prepaids and supplies	1,306	-15,561	-9,884	21,461
Accounts receivable	23,603	102	13,377	97,717
Hedging accounts	1,818	-1,779	6,151	3,479
Other current assets	2,914	14,807	2,622	-2,718
Crops and feed	4,159	21,999	23,987	-75,131
Marketlivestock	27,959	100,752	7,852	543
Breeding livestock	-8,478	-12,312	-2,222	-11,548
Other assets	-5,495	-14,364	3,212	-21,328
Accounts payable	-2,381	3,513	-19,394	5,157
Accrued interest	-5,638	-9,705	-7,071	-953
Total inventory change	39,767	87,452	18,632	16,679
Net operating profit	197,718	26,483	171,602	541,756
Depreciation				
Machinery and equipment	-57,433	-40,391	-57,544	-130,531
Titled vehicles	-4,993	-5,668	-5,258	-8,930
Buildings and improvements	-8,822	-5,728	-14,007	-21,108
Total depreciation	-71,247	-51,787	-76,809	-160,569
Net farm income from operations	126,470	-25,303	94,793	381,187
Gain or loss on capital sales	618	2,029	947	-1,365
·		·		
Netfarmincome	127,089	-23,274	95,739	379,822

Inventory Changes North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	108	21	21	22
Net cash farm income	157,951	-60,968	152,970	525,077
Crops and Feed Ending inventory Beginning inventory Inventory change	567,575	284,202	517,506	1,472,538
	563,416	262,203	493,519	1,547,669
	4,159	21,999	23,987	-75,131
Market Livestock Ending inventory Beginning inventory Inventory change	91,268	169,546	62,660	64,501
	63,309	68,794	54,807	63,958
	27,959	100,752	7,852	543
Accts Receivable Ending inventory Beginning inventory Inventory change	64,183	29,720	42,797	187,713
	40,580	29,618	29,420	89,996
	23,603	102	13,377	97,717
Prepaid Expenses and Supplies Ending inventory Beginning inventory Inventory change	71,440 70,134 1,306	31,675 47,236 -15,561	52,105 61,989 -9,884	212,514 191,053 21,461
Hedging Activities Ending inventory Withdrawals Beginning inventory Deposits Gain or loss	6,374	1,846	8,271	17,851
	5,016	2,190	7,760	11,547
	5,313	2,961	3,143	15,310
	4,259	2,855	6,737	10,609
	1,818	-1,779	6,151	3,479
Other Current Assets Ending inventory Beginning inventory Inventory change	7,241	19,835	13,698	2,559
	4,327	5,028	11,076	5,277
	2,914	14,807	2,622	-2,718
Breeding Livestock Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust	113,086	100,762	184,904	106,873
	988	158	1,349	-
	103,232	92,700	180,834	94,309
	19,320	20,532	7,641	24,112
	-8,478	-12,312	-2,222	-11,548
Other Capital Assets Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust	94,447	40,163	62,285	281,295
	2,150	90	43	6,100
	89,951	40,332	53,497	270,189
	12,141	14,286	5,619	38,534
	-5,495	-14,364	3,212	-21,328
Accounts Payable Beginning inventory Ending inventory Inventory change	26,511	29,146	14,890	45,971
	28,892	25,633	34,284	40,814
	-2,381	3,513	-19,394	5,157
Accrued Interest Beginning inventory Ending inventory Inventory change	19,188	24,233	16,956	31,547
	24,826	33,938	24,026	32,500
	-5,638	-9,705	-7,071	-953
Total inventory change	39,767	87,452	18,632	16,679
Net operating profit	197,718	26,483	171,602	541,756

Depreciation North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	108	21	21	22
Net operating profit	197,718	26,483	171,602	541,756
Machinery and Equipment				
Ending inventory	632,610	458,139	606,299	1,308,602
Capital sales	12,636	5,126	3,910	46,827
Beginning inventory	602,884	452,252	587,726	1,219,107
Capital purchases	99,795	51,404	80,028	266,853
Depreciation, capital adjust.	-57,433	-40,391	-57,544	-130,531
Titled Vehicles				
Ending inventory	51,885	52,961	54,198	79,692
Capital sales	869	1,000	466	2,206
Beginning inventory	50,063	51,755	53,114	75,333
Capital purchases	7,683	7,874	6,808	15,495
Depreciation, capital adjust.	-4,993	-5,668	-5,258	-8,930
Buildings and Improvements				
Ending inventory	258,246	118,447	380,176	519,590
Capital sales	4,514	3,949	-	9,185
Beginning inventory	248,418	104,915	359,363	502,753
Capital purchases	23,164	23,210	34,821	47,131
Depreciation, capital adjust.	-8,822	-5,728	-14,007	-21,108
Total depreciation, capital adj.	-71,247	-51,787	-76,809	-160,569
Net farm income from operations	126,470	-25,303	94,793	381,187
Gain or loss on capital sales	618	2,029	947	-1,365
Net farm income	127,089	-23,274	95,739	379,822

Profitability Measures North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	108	21	21	22
Profitability (assets valued at cost)				
Net farm income from operations	126,470	-25,303	94,793	381,187
Rate of return on assets	4.7 %	-0.4 %	3.5 %	7.0 %
Rate of return on equity	4.9 %	-10.1 %	2.4 %	8.5 %
Operating profit margin	14.3 %	-1.3 %	9.8 %	19.5 %
Asset turnover rate	33.2 %	32.6 %	35.9 %	36.0 %
Farm interest expense	50,130	57,538	61,155	69,746
Value of operator lbr and mgmt.	54,151	39,549	59,491	105,267
Return on farm assets	122,449	-7,314	96,456	345,666
Average farm assets	2,578,483	1,757,398	2,724,152	4,925,284
Return on farm equity	72,319	-64,852	35,302	275,920
Average farm equity	1,474,775	642,919	1,479,009	3,264,717
Value of farm production	855,367	572,793	979,256	1,770,787

Liquidity & Repayment Capacity Measures North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	108	21	21	22
Liquidity				
Current ratio	1.46	0.92	1.79	1.75
Working capital	194,163	-47,773	186,833	546,636
Working capital to gross inc	26.5 %	-6.3 %	33.5 %	38.3 %
Current assets	620,751	537,676	424,675	1,277,890
Current liabilities	426,587	585,449	237,842	731,254
Gross revenues (accrual)	733,546	754,478	557,610	1,425,859
Repayment capacity				
Net farm income from operations	126,470	-25,303	94,793	381,187
Depreciation	71,247	51,787	76,809	160,569
Personal income	41,682	34,226	53,997	31,980
Family living/owner withdrawals	-65,195	-57,524	-75,700	-91,661
Cash discrepancy	1	-289	-147	234
Payments on personal debt	-3,396	-4,510	-4,066	-3,615
Income taxes paid	-14,282	-7,014	-15,764	-24,993
Interest on term debt	21,348	31,360	1,177	31,569
Capital debt repayment capacity	177,875	22,732	131,099	485,269
Scheduled term debt payments	-84,630	-93,078	-88,032	-124,581
Capital debt repayment margin	93,245	-70,346	43,067	360,688
Cash replacement allowance	-40,711	-23,094	-36,228	-87,254
Replacement margin	52,534	-93,440	6,839	273,434
Term debt coverage ratio	2.10	0.24	1.49	3.90
Replacement coverage ratio	1.42	0.20	1.06	2.29

Balance Sheet at Cost Values North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018

(Farms Sorted By Net Farm Income)

	Avg. Of <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	High 20%
Number of farms	98	20	18	18
Assets				
Current Farm Assets				
Cash and checking balance	39,717	14,462	23,088	50,714
Prepaid expenses & supplies	45,856	32,477	18,232	124,564
Growing crops	167	339	-	58
Accounts receivable	39,464	26,455	23,981	93,546
Hedging accounts	4,191	1,938	2,975	13,072
Crops held for sale or feed	394,391	263,494	280,413	951,585
Market livestock held for sale	92,114	178,024	73,061	44,352
Other current assets	4,851	20,488	2,925	-
Total current farm assets	620,751	537,676	424,675	1,277,890
Intermediate Farm Assets				
Breeding livestock	85,707	105,800	90,021	60,363
Machinery and equipment	469,412	355,603	375,278	876,421
Titled vehicles	42,804	55,609	23,853	61,073
Other intermediate assets	16,651	20,741	12,417	4,972
Total intermediate farm assets	614,574	537,754	501,569	1,002,828
Long Term Farm Assets	0.40.40.4	504.047	0.47.440	000 400
Farm land	646,131	504,847	647,112	826,188
Buildings and improvements	174,401	124,370	148,930	336,332
Other long-term assets	19,213	21,430	3,874	34,724
Total long-term farm assets	839,745	650,647	799,915	1,197,245
Total Farm Assets	2,075,069	1,726,077	1,726,159	3,477,964
Total Nonfarm Assets	286,884	326,133	342,576	460,511
Total Assets	2,361,954	2,052,210	2,068,735	3,938,475
Liabilities				
Current Farm Liabilities				
Accrued interest	21,896	35,634	12,400	29,040
Accounts payable	25,437	26,915	12,924	46,624
Current notes	323,851	456,324	174,075	573,543
Principal due on term debt	55,404	66,576	38,444	82,047
Total current farm liabilities	426,587	585,449	237,842	731,254
Total intermediate farm liabs	144,713	178,698	101,532	237,061
Total long term farm liabilities	430,258	504,019	375,069	592,190
Total farm liabilities	1,001,559	1,268,166	714,443	1,560,506
Total nonfarm liabilities	54,005	91,405	45,402	96,020
Total liabilities	1,055,564	1,359,570	759,845	1,656,525
Net worth (farm and nonfarm)	1,306,389	692,640	1,308,890	2,281,950
Net worth change	76,241	-51,619	65,664	239,584
Percent net worth change	6 %	-7 %	5 %	12 %
Ratio Analysis	00.0/	400.0/	50 0/	57 0/
Current farm liabilities / assets	69 %	109 %	56 %	57 %
Intermediate farm liab. / assets	24 %	33 %	20 %	24 %
Long term farm liab. / assets Total debt to asset ratio	51 % 45 %	77 % 66 %	47 % 37 %	49 % 42 %
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Statement Of Cash Flows

North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of	4 - 000/	40 000/	111.1.000
	All Farms	<u>Low 20%</u>	40 - 60%	High 20%
Number of farms	108	21	21	22
Beginning cash (farm & nonfarm)	52,076	56,138	67,489	42,385
Cash Provided By Operating Activities				
Gross cash farm income	878,646	662,236	992,572	1,803,585
Total cash farm expense	-720,695	-723,205	-839,602	-1,278,508
Net cash from hedging transactions	757	-664	1,023	938
Cash provided by operating	158,708	-61,633	153,993	526,015
Cash Provided By Investing Activities				
Sale of breeding livestock	988	158	1,349	-
Sale of machinery & equipment	13,030	4,901	4,866	46,505
Sale of titled vehicles	883	1,000	457	2,284
Sale of farm land	9,193	18,095	26,564	-
Sale of farm buildings	5,095	6,210	· -	9,882
Sale of other farm assets	1,778	84	43	4,282
Sale of nonfarm assets	1,576	1,626	-	5,872
Purchase of breeding livestock	-19,320	-20,532	-7,641	-24,112
Purchase of machinery & equip.	-99,795	-51,404	-80,028	-266,853
Purchase of titled vehicles	-7,683	-7,874	-6,808	-15,495
Purchase of farm land	-87,028	-13,666	-174,631	-143,320
Purchase of farm buildings	-23,164	-23,210	-34,821	-47,131
Purchase of other farm assets	-12,141	-14,286	-5,619	-38,534
Purchase of nonfarm assets	-25,377	-15,072	-65,739	-33,356
Cash provided by investing	-241,964	-113,968	-342,008	-499,976
Cash Provided By Financing Activities				
Money borrowed	825,025	673,329	944,414	1,739,728
Principal payments	-704,336	-487,724	-732,821	-1,658,265
Personal income	41,682	34,226	53,997	31,980
Family living/owner withdrawals	-65,195	-57,524	-75,700	-91,661
Income and social security tax	-12,705	-6,919	-15,664	-20,993
Capital contributions	-	-	-	-
Capital distributions	-4,300	-2,381	-6,628	-7,864
Dividends paid	-	-	-	-
Cash gifts and inheritances	2,020	1,755	714	2,748
Gifts given	-1,015	-952	-	-3,688
Other cash flows	-	-	-	
Cash provided by financing	81,175	153,810	168,312	-8,015
Net change in cash balance	-2,080	-21,792	-19,702	18,024
Ending cash (farm & nonfarm)	49,997	34,057	47,640	60,643
Discrepancy	-1	289	147	-234

Financial Standards Measures North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of			
	All Farms	Low 20%	40 - 60%	High 20%
Number of farms	108	21	21	22
Liquidity				
Current ratio	1.46	0.92	1.79	1.75
Working capital	194,163	-47,773	186,833	546,636
Working capital to gross inc	26.5 %	-6.3 %	33.5 %	38.3 %
Solvency (cost)				
Farm debt to asset ratio	48 %	73 %	41 %	45 %
Farm equity to asset ratio	52 %	27 %	59 %	55 %
Farm debt to equity ratio	0.93	2.77	0.71	0.81
Profitability (cost)				
Rate of return on farm assets	4.7 %	-0.4 %	3.5 %	7.0 %
Rate of return on farm equity	4.9 %	-10.1 %	2.4 %	8.5 %
Operating profit margin	14.3 %	-1.3 %	9.8 %	19.5 %
Net farm income	127,089	-23,274	95,739	379,822
EBITDA	247,848	84,021	232,757	611,503
Repayment Capacity				
Capital debt repayment capacity	177,875	22,732	131,099	485,269
Capital debt repayment margin	93,245	-70,346	43,067	360,688
Replacement margin	52,534	-93,440	6,839	273,434
Term debt coverage ratio	2.10	0.24	1.49	3.90
Replacement coverage ratio	1.42	0.20	1.06	2.29
Efficiency				
Asset turnover rate (cost)	33.2 %	32.6 %	35.9 %	36.0 %
Operating expense ratio	73.2 %	89.1 %	77.8 %	66.0 %
Depreciation expense ratio	7.7 %	6.7 %	7.3 %	8.9 %
Interest expense ratio	5.4 %	7.5 %	5.8 %	3.9 %
Net farm income ratio	13.7 %	-3.0 %	9.1 %	21.1 %

Crop Production and Marketing Summary North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of		40007	
	All Farms	Low 20%	40 - 60%	High 20%
Number of farms	108	21	21	22
Acreage Summary				
Total acres owned	764	588	685	1,036
Total crop acres	2,030	1,352	2,052	4,467
Crop acres owned	476	336	390	692
Crop acres cash rented	1,470	1,001	1,595	3,544
Crop acres share rented	84	15	67	231
Total pasture acres	454	493	519	449
Percent crop acres owned	23 %	25 %	19 %	16 %
Mach invest/crop acre cost	327	360	317	300
Average Price Received (Cash Sales 0	Only)			
Soybeans per bushel	8.81	8.67	8.60	8.91
Corn per bushel	3.10	3.04	3.15	3.10
Wheat, Spring per bushel	5.83	6.29	5.52	5.92
Beans, Pinto per cwt	22.07	-	-	21.77
Barley per bushel	4.30	-	-	4.26
Canola per cwt	18.28	-	-	16.20
Sunflowers per cwt	17.24	-	-	-
Average Yield Per Acre				
Soybeans (bushel)	35.91	32.81	40.44	35.00
Wheat, Spring (bushel)	55.23	46.99	57.70	58.03
Corn (bushel)	140.77	133.04	147.29	134.11
Hay, Grass (ton)	1.34	-	-	1.58
Beans, Pinto (cwt)	12.33	_	_	16.50
Corn Silage (ton)	18.28	_	_	10.00
Canola (cwt)	18.20	_	_	18.57
Hay, Alfalfa (ton)	3.24	_	-	10.57
Barley (bushel)	75.35	_	-	77.49
Hay, Mixed Alfalfa/Grass (ton)	1.39	_	_	
Hay, Small Grain (ton)	2.67	_	-	_
Peas, Field (bushel)	38.74	_	-	_
Sunflowers (cwt)	21.69	_	-	23.94
Wheat, Durum (bushel)	47.57	_	_	47.57

Household and Personal Expenses North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	40 - 60%	High 20%
Number of farms	35	7	5
Average family size	2.7	2.9	4.4
Family Living Expenses			
Food and meals expense	7,478	6,829	10,012
Medical care	3,073	1,712	5,380
Health insurance	6,433	5,297	8,076
Cash donations	1,959	2,285	509
Household supplies	5,626	4,135	7,382
Clothing	1,265	914	2,053
Personal care	4,350	5,248	7,570
Child / Dependent care	328	23	1,281
Alimony and child support	-	-	-
Gifts	1,374	3,235	709
Education	621	552	830
Recreation	2,571	1,859	4,133
Utilities (household share)	2,726	3,192	3,537
Personal vehicle operating exp	2,375	2,071	3,018
Household real estate taxes	226	852	· <u>-</u>
Dwelling rent	150	343	-
Household repairs	726	846	566
Personal interest	286	55	375
Disability / Long term care ins	543	889	311
Life insurance payments	2,027	480	7,514
Personal property insurance	305	661	777
Miscellaneous	1,148	307	1,906
Total cash family living expense	45,589	41,784	65,937
Family living from the farm	34	, - -	-
Total family living	45,623	41,784	65,937
Other Nonfarm Expenditures			
Income taxes	17,429	25,850	17,272
Furnishing & appliance purchases	-	==,,,,,	-
Nonfarm vehicle purchases	1,796	-	-
Nonfarm real estate purchases	34,441	144,303	_
Other nonfarm capital purchases	-261	-	_
Nonfarm savings & investments	1,848	-	1,920
Total other nonfarm expenditures	55,253	170,154	19,192
Total cash family living			
investment & nonfarm capital purch	100,842	211,937	85,130

Operator and Labor Information North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	108	21	21	22
Operator Information				
Average number of operators	1.1	1.0	1.3	1.2
Average age of operators	45.3	45.8	43.9	43.9
Average number of years farming	20.3	18.7	19.1	20.5
Results Per Operator				
Working capital	299,175	8,079	187,513	938,974
Total assets (cost)	2,623,492	2,032,304	2,486,520	4,685,250
Total liabilities	1,080,961	1,237,083	1,094,709	1,509,234
Net worth (cost)	1,542,531	795,221	1,391,811	3,176,017
Gross farm income	819,234	736,249	814,763	1,520,206
Total farm expense	707,276	760,402	741,035	1,197,663
Net farm income from operations	111,957	-24,153	73,728	322,543
Net nonfarm income	36,898	32,670	41,998	27,060
Family living & tax withdrawals	70,356	61,880	71,253	98,510
Total acres owned	676.6	561.4	533.1	876.2
Total crop acres	1,797.1	1,290.9	1,596.2	3,780.1
Crop acres owned	420.9	321.2	303.7	585.9
Crop acres cash rented	1,301.4	955.6	1,240.3	2,998.8
Crop acres share rented	74.7	14.2	52.1	195.4
Total pasture acres	401.6	470.5	403.8	380.1
Labor Analysis				
Number of farms	108	21	21	22
Total unpaid labor hours	1,840	1,581	1,638	2,659
Total hired labor hours	1,640	2,675	2,548	2,480
Total labor hours per farm	3,481	4,256	4,186	5,140
Unpaid hours per operator	1,629	1,509	1,274	2,250

Nonfarm Summary North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	108	21	21	22
Nonfarm Income				
Personal wages & salary	22,464	24,459	23,293	23,204
Net nonfarm business income	6,295	4,210	24,835	1,184
Personal rental income	4,237	-	-	116
Personal interest income	486	47	76	2,052
Personal cash dividends	241	6	331	539
Taxrefunds	300	184	120	389
Other nonfarm income	7,659	5,319	5,342	4,495
Total nonfarm income	41,682	34,226	53,997	31,980
Gifts and inheritances	2,020	1,755	714	2,748

Financial Summary North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (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	108	14	18	23	26	16	11
Income Statement							
Gross cash farm income	878,646	48,756	185,073	388,109	694,122	1,354,539	3,839,414
Total cash farm expense	720,695	77,841	164,724	295,576	566,287	1,109,127	3,137,499
Net cash farm income	157,951	-29,085	20,349	92,532	127,835	245,413	701,915
Inventory change	39,767	57,478	24,916	47,570	47,506	78,412	-49,295
Depreciation	-71,247	-3,381	-12,819	-24,622	-47,339	-137,450	-310,937
Net farm income from operations	126,470	25,012	32,446	115,480	128,002	186,375	341,684
Gain or loss on capital sales	618	-	-600	-1,860	-1,352	8,418	1,892
Average net farm income	127,089	25,012	31,846	113,620	126,650	194,793	343,576
Median net farm income	89,467	22,462	32,840	118,878	106,792	143,128	352,099
Profitability (cost)							
Rate of return on assets	4.7 %	3.5 %	3.8 %	6.7 %	6.3 %	4.6 %	3.6 %
Rate of return on equity	4.9 %	4.1 %	3.2 %	7.9 %	7.5 %	4.9 %	2.7 %
Operating profit margin	14.3 %	16.1 %	12.8 %	23.8 %	18.8 %	13.0 %	10.4 %
Asset turnover rate	33.2 %	21.8 %	29.9 %	28.3 %	33.4 %	35.1 %	34.5 %
Liquidity & Repayment (end of y	ear)						
Current assets	620,751	122,293	143,641	446,746	617,482	1,155,443	2,657,768
Current liabilities	426,587	79,803	80,945	195,282	450,185	846,415	2,093,791
Current ratio	1.46	1.53	1.77	2.29	1.37	1.37	1.27
Working capital	194,163	42,490	62,696	251,464	167,297	309,028	563,976
Change in working capital	7,542	29,055	-2,635	30,521	23,058	-39,425	-64,794
Working capital to gross inc	26.5 %	37.8 %	30.0 %	57.8 %	22.3 %	21.5 %	17.5 %
Term debt coverage ratio	2.10	2.27	1.00	3.79	2.00	1.75	2.16
Replacement coverage ratio Term debt to EBITDA	1.42 2.32	1.80 2.99	0.82	2.33	1.46 2.47	1.20 2.63	1.34 2.19
Term debt to EBITDA	2.32	2.99	3.04	1.53	2.47	2.03	2.19
Solvency (end of year at cost)						4.0	
Number of sole proprietors	98	14	17	23	25	13	6
Total assets	2,361,954	555,891	774,913	2,012,323	2,474,937	4,451,525	7,414,799
Total liabilities	1,055,564	318,055	341,650	519,559	1,083,887	2,189,828	4,278,278
Net worth	1,306,389	237,836	433,262	1,492,764	1,391,050	2,261,698	3,136,520
Net worth change	76,241	23,918	13,147	104,831	104,561	105,718	85,632
Farm debt to asset ratio	48 %	57 %	49 %	30 %	46 %	52 %	60 % 58 %
Total debt to asset ratio Change in earned net worth %	45 % 6 %	57 % 11 %	44 % 3 %	26 % 8 %	44 % 8 %	49 % 5 %	3 %
Change in earned het worth 70	0 70	11 /0	3 70	0 70	0 70	J 70	3 70
Nonfarm Information	44.000	00.000	40.044	75 744	00.047	40.574	00.540
Net nonfarm income	41,682	28,886	46,614	75,741	36,317	19,574	23,516
Farms reporting living expenses	35	5	42.400	9 46.954	11	3	1
Total family living expense	45,623	28,375	43,408	46,854	41,565	-	-
Crop Acres	0.000	000	100	4.000	4 ====	0.000	7 000
Total crop acres	2,030	288	403	1,080	1,792	3,283	7,638
Total crop acres owned	476	53	124	311	637	816	1,054
Total crop acres cash rented	1,470	189	234	716	1,046	2,332	6,449
Total crop acres share rented	84	46 140	45	53	108	134	135
Machinery value per crop acre	327	148	329	340	324	346	323

Financial Summary North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Age of Operator)

	Avg. Of All Farms	Less Than 31	31 - 40	41 - 50	51 - 60	Over 60
Number of farms	108	24	16	18	24	26
Income Statement						
Gross cash farm income	878,646	350,275	1,083,292	691,600	1,728,869	585,109
Total cash farm expense	720,695	313,955	1,057,024	553,965	1,316,566	454,568
Net cash farm income	157,951	36,320	26,268	137,635	412,303	130,541
Inventory change	39,767	72,627	143,782	38,298	-33,191	13,786
Depreciation	-71,247	-18,851	-60,908	-50,512	-158,595	-59,703
Net farm income from operations	126,470	90,096	109,142	125,421	220,517	84,624
Gain or loss on capital sales	618	3,808	-55	-1,654	1,743	-1,377
Average net farm income	127,089	93,904	109,087	123,767	222,260	83,248
Median net farm income	89,467	62,186	67,582	85,220	128,915	74,821
Profitability (cost)						
Rate of return on assets	4.7 %	9.0 %	4.7 %	6.9 %	4.2 %	3.3 %
Rate of return on equity	4.9 %	17.8 %	4.5 %	10.0 %	4.0 %	2.8 %
Operating profit margin	14.3 %	19.2 %	11.1 %	16.7 %	13.8 %	13.7 %
Asset turnover rate	33.2 %	46.7 %	42.1 %	41.4 %	30.9 %	24.0 %
Liquidity & Repayment (end of ye						
Current assets	620,751	321,868	901,109	440,185	1,043,659	462,335
Current liabilities	426,587	220,186	650,532	354,874	774,398	205,778
Current ratio	1.46	1.46	1.39	1.24	1.35	2.25
Working capital	194,163	101,682	250,577	85,311	269,261	256,557
Change in working capital	7,542	16,911	-4,758	-5,418	12,470	10,398
Working capital to gross inc	26.5 %	23.6 %	20.6 %	14.9 %	23.8 %	57.5 %
Term debt coverage ratio	2.10	3.28	1.91	1.55	2.11	2.20
Replacement coverage ratio	1.42	2.34	1.26	1.24	1.48	1.22
Term debt to EBITDA	2.32	2.15	2.45	2.28	2.28	2.45
Solvency (end of year at cost)		•				
Number of sole proprietors	98	24	16	15	21	22
Total assets	2,361,954	1,060,030	2,710,936	1,784,477	3,936,529	2,419,159
Total liabilities	1,055,564	676,573	1,391,124	933,476	1,840,153	559,282
Net worth	1,306,389	383,457	1,319,812	851,000	2,096,376	1,859,877
Net worth change	76,241	80,233 65 %	57,353	67,501 56 %	106,465	62,731
Farm debt to asset ratio	48 %	64 %	52 % 51 %	50 % 52 %	50 % 47 %	27 %
Total debt to asset ratio Change in earned net worth %	45 % 6 %	26 %	51%	52 % 9 %	47 % 5 %	23 % 3 %
· ·	0 70	20 /0	J /0	9 70	J /0	3 /0
Nonfarm Information Net nonfarm income	41,682	23,788	21 261	22,620	43,862	73,887
Farms reporting living expenses	41,062	23,700 7	34,361 7	22,620 2	43,002 6	13,001
Total family living expense	45,623	29,749	48,128	-	52,668	50,375
Crop Acres						
Total crop acres	2,030	946	2,158	1,652	3,907	1,481
Total crop acres owned	2,030 476	163	2,136	395	935	558
Total crop acres cash rented	1,470	760	1,772	1,232	2,898	787
Total crop acres share rented	84	23	174	25	74	136
Machinery value per crop acre	327	164	287	276	326	504
, her erek erer	021	101	201	2.0	020	50 4

Financial Summary North Dakota Farm Business Management Education Program Region 3 - South Central North Dakota, 2018 (Farms Sorted By Farm Type)

Avg. Of All Farms	Сгор	Beef	Crop and Beef	Other
108	64	12	14	16
878.646	1.026.396	173.450	578.327	752,948
				766,783
				-13,835
				117,421
			•	-29,233
				74,354
				2,577
				76,931
				40,877
09,407	100,000	20,214	102,201	40,077
				5.4 %
4.9 %	4.8 %	-0.6 %	9.9 %	5.2 %
14.3 %	14.2 %	8.4 %	21.5 %	13.2 %
33.2 %	32.3 %	17.8 %	35.3 %	40.9 %
620 751	735 3/1	100 307	6/3 005	554,179
	•			467,547
			•	1.19
				86,633
				-12,547
				9.7 %
				1.61
2.32	2.08	5.56	2.05 1.48	1.27 3.19
		4.0	40	4.0
				16
				1,907,856
		•		1,165,474
				742,382
				59,565
				65 %
				61 %
6 %	6 %	1 %	9 %	9 %
41.682	48.376	32.528	22.551	42,200
				8
45,623	54,664	-	-	37,613
2.020	0.660	444	4 OE7	4.050
				1,053
				185
				852
				16
327	341	247	287	263
	All Farms 108 878,646 720,695 157,951 39,767 -71,247 126,470 618 127,089 89,467 4.7 % 4.9 % 14.3 % 33.2 % 620,751 426,587 1.46 194,163 7,542 26.5 % 2.10 1.42 2.32 98 2,361,954 1,055,564 1,306,389 76,241 48 % 45 % 6 % 41,682 35	All Farms Crop 108 64 878,646 1,026,396 720,695 793,787 157,951 232,609 39,767 20,905 -71,247 -97,918 126,470 155,595 618 1,228 127,089 156,824 89,467 108,685 4.7 % 4.6 % 4.9 % 4.8 % 14.3 % 14.2 % 33.2 % 32.3 % 620,751 735,341 426,587 483,210 1.46 1.52 194,163 252,131 7,542 10,174 26.5 % 30.7 % 2.10 2.40 1.42 1.48 2.32 2.08 98 56 2,361,954 2,870,449 1,055,564 1,214,406 1,306,389 1,656,043 76,241 90,247 48 % 46 % 45 %	All Farms Crop Beef 108 64 12 878,646 1,026,396 173,450 720,695 793,787 161,896 157,951 232,609 11,554 39,767 20,905 20,928 -71,247 -97,918 -12,610 126,470 155,595 19,872 618 1,228 -911 127,089 156,824 18,961 89,467 108,685 26,214 4.7 % 4.6 % 1.5 % 4.9 % 4.8 % -0.6 % 14.3 % 14.2 % 8.4 % 33.2 % 32.3 % 17.8 % 620,751 735,341 199,397 426,587 483,210 147,856 1,46 1.52 1.35 194,163 252,131 51,541 7,542 10,174 -22,891 26.5 % 30.7 % 26.1 % 2.10 2.40 0.60 1,42 1,48	Ref Reef R

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 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. Net returns are also calculated after a charge for unpaid operator labor and management and after an allocation of direct government payments. The last section of each crop table contains breakeven yield measures which provide useful standards or goals for the individual managers.

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

Market Facilitation Payments, a 2018 USDA FSA program for commodities directly impacted by retaliatory tariffs, are included under "Other crop income per acre." "Government payments" are ARC and PLC payments which are not associated with specific crop planting.

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 Cash Rent

	Avg. Of All Farms
Number of farms	8
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	258.88 76.26 100.00 4.02 306.95 2.03 308.99
Direct Expenses Seed and plants Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Hired labor Land rent Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	19.67 49.95 27.48 14.83 10.78 19.76 4.12 1.01 66.71 0.11 3.80 2.61 220.82 88.16
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	9.77 7.12 0.15 5.94 3.82 4.16 0.17 35.77 7.91 74.81 295.64 13.35
Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt	20.58 33.93 22.40 11.53
Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management	2.90 3.88 3.58 3.87
Net value per unit Machinery cost per acre Est. labor hours per acre	4.02 73.07 1.05

Beans, Pinto on Cash Rent

	Avg. Of <u>All Farms</u>
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 Other crop income per acre Gross return per acre	471.36 11.84 100.00 22.33 264.40 69.49 0.44 334.33
Direct Expenses Seed and plants Fertilizer Crop chemicals Crop insurance Drying expense Fuel & oil Repairs Custom hire Hired labor Land rent Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	57.56 31.91 46.21 21.31 0.14 11.89 20.73 0.19 5.20 65.71 3.99 9.72 0.71 275.26 59.06
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	5.55 5.94 0.35 5.49 4.23 0.62 3.12 27.70 12.38 65.38 340.65 -6.32
Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt	10.83 4.51 23.91 -19.40
Cost of Production Total direct expense per cwt. Total dir & ovhd exp per cwt. Less govt & other income With labor & management	23.24 28.77 21.95 23.97
Net value per unit Machinery cost per acre Est. labor hours per acre	22.33 69.18 1.06

Canola on Cash Rent

	Avg. Of <u>All Farms</u>
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	341.02 18.08 100.00 15.95 288.36 0.07 288.43
Direct Expenses Seed and plants Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Hired labor Land rent Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	54.44 62.75 30.98 9.73 13.33 20.51 9.71 7.16 59.56 1.84 4.06 0.63 274.71 13.72
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	0.11 2.62 1.76 4.01 2.90 0.28 2.49 28.48 3.81 46.47 321.18 -32.75
Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt	17.26 -15.49 21.08 -36.57
Cost of Production Total direct expense per cwt. Total dir & ovhd exp per cwt. Less govt & other income With labor & management	15.20 17.77 16.81 17.97
Net value per unit Machinery cost per acre Est. labor hours per acre	15.95 74.25 0.87

Corn on Owned Land

	Avg. Of <u>All Farms</u>
Number of farms	21
Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Crop insurance per acre Other crop income per acre Gross return per acre	308.66 143.19 100.00 3.26 467.01 10.05 1.81 478.87
Direct Expenses Seed and plants Fertilizer Crop chemicals Crop insurance Drying expense Fuel & oil Repairs Custom hire Hired labor Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	91.29 109.19 27.71 18.17 8.57 17.74 32.20 4.27 1.14 0.13 10.84 2.48 323.76 155.11
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	10.03 3.68 8.55 5.88 3.71 1.21 54.64 46.12 4.37 138.19 461.94 16.93
Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt	16.02 32.94 33.12 -0.17
Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management	2.26 3.23 3.03 3.26
Net value per unit Machinery cost per acre Est. labor hours per acre	3.26 104.61 1.60

Corn on Cash Rent

	Avg. Of			
	<u>All Farms</u>	Low 20%	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	29	5	6	6
Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Crop insurance per acre Other crop income per acre Gross return per acre	645.16	816.43	513.83	205.88
	137.51	92.03	120.80	183.09
	100.00	100.00	100.00	100.00
	3.23	3.38	3.30	3.15
	443.55	310.74	398.08	577.01
	17.08	13.89	79.33	-
	1.76	0.92	0.98	5.87
	462.39	325.55	478.39	582.88
Direct Expenses Seed and plants Fertilizer Crop chemicals Crop insurance Drying expense Fuel & oil Repairs Custom hire Hired labor Land rent Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	81.44 92.03 22.70 18.22 4.85 17.48 30.39 7.03 1.10 80.85 1.29 10.68 1.04 369.09 93.31	77.82 91.63 22.55 11.58 13.80 26.76 3.00 4.85 81.79 2.18 9.87	78.70 87.93 21.02 25.41 12.25 15.75 20.35 27.64 0.25 85.18 0.16 11.90 2.56 389.09 89.29	84.01 77.80 26.54 23.05 3.33 21.20 26.33 6.39 - 79.37 - 10.20 0.83 359.05 223.83
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	17.32	15.65	11.03	14.21
	8.23	6.40	28.54	1.96
	5.47	4.04	6.22	4.92
	4.92	4.46	4.92	3.93
	2.67	0.17	1.54	2.48
	4.01	2.09	0.99	4.89
	44.75	39.32	19.93	24.65
	7.63	7.40	19.27	2.67
	94.99	79.52	92.45	59.72
	464.08	425.34	481.54	418.77
	-1.68	-99.78	-3.15	164.11
Government payments	12.42	14.22	14.66	6.53
Net return with govt pmts	10.74	-85.56	11.50	170.64
Labor & management charge	33.04	28.43	36.61	31.98
Net return over lbr & mgt	-22.31	-114.00	-25.10	138.66
Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management	2.68	3.76	3.22	1.96
	3.37	4.62	3.99	2.29
	3.15	4.31	3.20	2.22
	3.39	4.62	3.50	2.39
Net value per unit	3.23	3.38	3.30	3.15
Machinery cost per acre	106.79	87.87	110.43	84.81
Est. labor hours per acre	1.57	1.46	1.86	2.11

Corn Silage on Cash Rent

	Avg. Of <u>All Farms</u>
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	116.39 17.50 100.00 29.09 509.28 509.28
Direct Expenses Seed and plants 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	73.34 84.42 28.01 18.89 19.32 36.46 33.16 75.75 6.83 0.07 376.24 133.04
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	1.53 24.02 6.55 3.95 3.28 2.15 7.39 36.67 2.61 88.15 464.39 44.90
Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt	4.21 49.10 29.94 19.17
Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management	21.49 26.53 26.29 28.00
Net value per unit Machinery cost per acre Est. labor hours per acre	29.09 134.62 1.47

CRP on Owned Land

	Avg. Of All Farms
Number of farms	12
Acres	200.11
Yield per acre (\$)	61.22
Operators share of yield %	100.00
Value per \$	1.00
Total product return per acre	61.22 61.22
Gross return per acre	01.22
Direct Expenses	
Crop chemicals	0.38
Fuel & oil	0.94
Repairs	2.41
Miscellaneous	0.28
Total direct expenses per acre	4.01
Return over direct exp per acre	57.21
Overhead Expenses	
Hired labor	0.43
RE & pers. property taxes	7.51
Farm insurance	2.67
Interest	36.46
Mach & bldg depreciation	1.86
Miscellaneous	1.22
Total overhead expenses per acre	50.15
Total dir & ovhd expenses per acre	54.16
Net return per acre	7.06

Hay, Alfalfa on Cash Rent

	Avg. Of All Farms
Number of farms	5
Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Gross return per acre	115.50 2.42 100.00 76.81 185.94 185.94
Direct Expenses Seed and plants Fertilizer Fuel & oil Repairs Hired labor Land rent Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	10.84 17.32 9.43 15.92 3.51 62.95 2.35 1.71 124.03 61.91
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	6.10 1.14 4.65 2.37 3.04 1.57 27.75 2.41 49.03 173.06 12.88
Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt	6.03 18.91 16.48 2.44
Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management	51.24 71.49 69.00 75.80
Net value per unit Machinery cost per acre Est. labor hours per acre	76.81 52.42 0.92

Hay, Grass on Cash Rent

	Avg. Of All Farms
Number of farms	6
Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Gross return per acre	360.17 1.27 100.00 57.67 73.32 73.32
Direct Expenses Fuel & oil Repairs Land rent Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	8.57 15.69 15.16 2.61 2.21 44.24 29.09
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	9.26 0.34 0.90 1.02 0.44 0.47 11.51 4.82 28.77 73.00 0.32
Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt	0.32 10.35 -10.03
Cost of Production Total direct expense per ton Total dir & ovhd exp per ton Less govt & other income With labor & management	34.80 57.42 57.42 65.56
Net value per unit Machinery cost per acre Est. labor hours per acre	57.67 36.11 1.46

Pasture on Owned Land

	Avg. Of All Farms
Number of farms	19
Acres	464.26
Yield per acre (aum)	1.11
Operators share of yield %	100.00
Value per aum	22.22
Total product return per acre	24.72
Gross return per acre	24.72
Direct Expenses	
Fertilizer	0.15
Fuel & oil	0.67
Repairs	1.07
Operating interest	0.26
Miscellaneous	0.29
Total direct expenses per acre	2.45
Return over direct exp per acre	22.27
Overhead Expenses	
Hired labor	0.36
RE & pers. property taxes	3.38
Farm insurance	0.53
Utilities	0.20
Interest	8.11
Mach & bldg depreciation	1.11
Miscellaneous	0.54
Total overhead expenses per acre	14.22
Total dir & ovhd expenses per acre	16.67
Net return per acre	8.05

Pasture on Cash Rent

	Avg. Of All Farms
Number of farms	19
Acres	1,047.65 1.11
Yield per acre (aum) Operators share of yield %	100.00
Value per aum	21.32
Total product return per acre	23.66
Gross return per acre	23.66
Direct Expenses	
Crop chemicals	0.15
Fuel & oil	0.73
Repairs	0.90
Land rent	18.56
Miscellaneous	0.36
Total direct expenses per acre	20.70
Return over direct exp per acre	2.96
Overhead Expenses	
Hired labor	0.43
Farm insurance	0.60
Utilities	0.22
Dues & professional fees	0.28
Mach & bldg depreciation Miscellaneous	1.22 0.36
Total overhead expenses per acre	3.11
Total dir & ovhd expenses per acre	23.81
Net return per acre	-0.15

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	376.50 36.05 100.00 7.77 280.02 35.05 315.07
Direct Expenses Seed and plants Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Hired labor Land rent Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	56.98 9.29 48.18 24.29 10.18 23.48 1.66 9.99 74.98 4.76 9.26 1.32 274.37 40.71
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	3.49 6.16 0.36 5.40 5.63 0.58 0.52 21.46 13.75 57.35 331.72 -16.64
Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt	14.15 -2.49 21.72 -24.21
Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management	7.61 9.20 7.84 8.44
Net value per unit Machinery cost per acre Est. labor hours per acre	7.77 64.02 1.08

Soybeans on Owned Land

	Avg. Of <u>All Farms</u>	Low 20%	40 - 60%	High 20%
Number of farms	29	5	6	6
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	403.78 34.74 100.00 8.23 285.91 0.38 14.51 55.18 355.99	271.94 30.04 100.00 8.07 242.47 16.61 50.31 309.39	631.27 34.54 100.00 8.19 282.85 5.81 50.81 339.47	504.18 40.90 100.00 8.19 335.10 0.81 70.47 406.38
Direct Expenses Seed and plants Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Hired labor Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	64.97 8.82 27.56 13.29 13.00 19.64 7.23 0.84 1.18 7.85 1.81 166.20 189.78	68.92 15.16 34.85 19.29 12.43 22.09 3.46 1.99 6.24 5.63 190.07 119.32	65.65 9.75 23.13 12.29 15.53 18.82 1.63 0.62 10.54 2.23 160.19 179.28	66.63 1.64 22.03 11.35 11.60 17.79 10.66 3.65 5.69 0.55 151.59 254.79
Overhead Expenses Custom hire 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	1.65 5.92 1.57 0.43 7.79 4.89 3.31 1.29 26.29 32.84 4.21 90.21 256.41 99.57	0.87 0.99 0.20 8.34 7.90 3.44 1.58 46.20 38.41 3.72 111.66 301.72 7.67	3.41 9.48 1.50 0.74 5.95 4.88 2.99 0.72 10.65 46.54 5.72 92.59 252.77 86.70	2.06 2.95 1.60 8.96 4.16 3.51 0.64 27.70 20.53 2.40 74.50 226.09 180.29
Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt	13.67 113.24 22.87 90.37	26.10 33.77 22.56 11.21	15.38 102.08 21.53 80.55	8.99 189.28 25.71 163.57
Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management	4.78 7.38 4.97 5.63	6.33 10.04 6.95 7.70	4.64 7.32 5.23 5.86	3.71 5.53 3.57 4.19
Net value per unit Machinery cost per acre Est. labor hours per acre	8.24 77.52 1.12	8.07 79.56 0.74	8.19 85.03 1.06	8.19 70.48 1.29

Soybeans on Cash Rent

	Avg. Of <u>All Farms</u>	Low 20%	40 - 60%	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	1,232.98 35.74 100.00 8.21 293.52 0.68 28.26 52.94 375.39	963.93 33.57 100.00 7.87 264.12 6.69 41.30 312.11	1,079.69 35.25 100.00 8.20 288.92 - 2.76 46.46 338.15	1,081.74 44.95 100.00 8.51 382.34 3.48 74.42 460.24
Direct Expenses Seed and plants Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Hired labor Land rent Machinery leases Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	65.13 10.28 27.30 14.47 11.74 19.91 2.96 0.62 70.82 0.86 7.20 1.21 232.51 142.88	60.15 10.71 30.88 10.12 13.60 18.78 3.86 1.21 89.20 2.96 8.97 0.87 251.32 60.79	66.04 6.29 23.37 18.32 13.85 14.46 1.73 58.97 0.16 11.50 2.44 217.14 121.01	57.62 3.60 31.45 17.21 13.46 29.45 4.68 73.65 1.59 6.15 0.26 239.12 221.12
Overhead Expenses Custom hire 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	0.16	0.19	0.58	0.01
	13.20	11.89	8.06	23.52
	5.50	10.68	3.59	5.60
	0.38	-	1.50	0.22
	5.12	4.60	4.39	4.20
	3.43	2.60	3.34	3.71
	2.54	1.06	0.71	1.81
	3.77	6.49	1.89	7.01
	32.61	28.62	43.65	24.55
	5.60	9.64	4.42	3.22
	72.30	75.77	72.13	73.85
	304.82	327.09	289.26	312.97
	70.58	-14.98	48.88	147.27
Government payments	15.36	34.20	17.05	4.80
Net return with govt pmts	85.94	19.22	65.93	152.08
Labor & management charge	21.52	23.33	22.58	23.19
Net return over lbr & mgt	64.42	-4.11	43.36	128.89
Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management	6.51	7.49	6.16	5.32
	8.53	9.74	8.21	6.96
	5.81	7.30	6.33	5.12
	6.41	7.99	6.97	5.64
Net value per unit	8.23	7.87	8.20	8.51
Machinery cost per acre	73.22	82.30	73.73	81.64
Est. labor hours per acre	1.00	0.95	1.01	0.98

Wheat, Spring on Owned Land

	Avg. Of		40.000/	
	All Farms	Low 20%	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	27	5	6	6
Acres	355.53	408.35	511.27	195.57
Yield per acre (bu.)	52.22	46.55	52.64	66.98
Operators share of yield % Value per bu.	100.00 5.24	100.00 5.63	100.00 5.21	100.00 5.31
Total product return per acre	273.50	262.15	274.30	355.85
Crop insurance per acre	6.68	-	-	-
Other crop income per acre	8.01	6.52	7.00	6.81
Gross return per acre	288.19	268.66	281.30	362.66
Direct Expenses				
Seed and plants	21.08	23.94	20.93	18.14
Fertilizer Crop chemicals	62.38 29.24	71.75 39.78	62.55 17.32	54.58 29.41
Crop insurance	12.88	15.27	10.54	15.16
Fuel & oil	11.75	12.23	10.43	13.95
Repairs	21.28	20.85	24.26	17.30
Custom hire	7.72	3.76	12.18	2.16
Hired labor	1.76	-	1.49	-
Machinery leases Operating interest	1.42 6.04	10.62	- 4 70	6.60
Miscellaneous	1.72	1.03	4.79 3.31	6.69 1.00
Total direct expenses per acre	177.25	199.22	167.80	158.39
Return over direct exp per acre	110.94	69.44	113.50	204.27
Overhead Expenses				
Hired labor	4.25	3.48	4.49	6.84
Machinery leases	0.90	0.10	1.84	0.96
Building leases	0.29	0.01	0.56	0.87
RE & pers. property taxes Farm insurance	8.00 5.17	10.22 7.61	8.06 3.76	8.01 4.38
Utilities	3.24	1.91	2.39	3.18
Dues & professional fees	0.48	0.62	0.42	0.76
Interest	33.13	36.45	42.06	18.03
Mach & bldg depreciation	34.33	47.98	28.13	34.47
Miscellaneous	5.57 95.36	7.38 115.77	2.23 93.94	5.13 82.63
Total overhead expenses per acre Total dir & ovhd expenses per acre	272.61	115.77 315.00	261.74	241.02
Net return per acre	15.58	-46.33	19.56	121.64
Government payments	17.45	16.17	17.87	26.36
Net return with govt pmts	33.02	-30.17	37.43	148.00
Labor & management charge	21.97	21.64	21.22	24.21
Net return over lbr & mgt	11.05	-51.81	16.21	123.79
Cost of Production				
Total direct expense per bu.	3.39	4.28	3.19	2.36
Total dir & ovhd exp per bu.	5.22	6.77	4.97	3.60
Less govt & other income	4.60	6.28	4.50	3.10
With labor & management	5.03	6.74	4.90	3.46
Net value per unit	5.24	5.63	5.21	5.31
Machinery cost per acre	77.11	83.49	80.11	67.56
Est. labor hours per acre	0.99	0.90	0.98	1.05

Wheat, Spring on Cash Rent

	Avg. Of	Low 20%	40 60%	High 200/
Number of forms	_ All Farms	-	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	28	5	5	6
Acres Yield per acre (bu.)	1,008.72 56.38	1,333.45 40.01	1,145.30 53.82	1,408.75 66.79
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.33	5.84	5.34	5.21
Total product return per acre	300.80	233.54	287.38	348.19
Crop insurance per acre Other crop income per acre	12.18 6.22	38.79 2.83	13.48 9.65	0.62 4.30
Gross return per acre	319.19	275.16	310.50	353.11
Direct Expenses				
Seed and plants	19.63	16.98	31.92	13.93
Fertilizer	63.00	76.76 20.64	66.39	50.86
Crop chemicals Crop insurance	29.40 14.75	29.64 11.68	28.17 15.35	26.28 17.57
Fuel & oil	12.06	12.23	9.62	12.07
Repairs	17.96	20.57	18.19	13.40
Custom hire	4.83	14.16	1.68	0.50
Hired labor Land rent	2.94 58.81	3.70 68.27	5.37 57.20	53.80
Machinery leases	1.23	-	2.56	-
Operating interest	7.30	7.28	6.61	9.82
Miscellaneous	1.21	0.44	-	2.17
Total direct expenses per acre Return over direct exp per acre	233.13 86.06	261.70 13.46	243.06 67.44	200.39 152.72
Overhead Expenses				
Hired labor [*]	9.09	9.88	11.38	7.49
Machinery leases	3.72	7.53	4.54	1.98
Building leases Farm insurance	0.43 4.40	0.01 3.88	0.15 4.34	1.05 3.59
Utilities	3.20	2.48	4.60	2.81
Dues & professional fees	0.77	0.47	0.20	0.67
Interest	3.19	6.02	2.34	1.12
Mach & bldg depreciation Miscellaneous	32.94 6.20	29.18 7.50	24.75 7.20	38.45 4.62
Total overhead expenses per acre	63.94	66.95	59.49	61.78
Total dir & ovhd expenses per acre	297.07	328.66	302.54	262.17
Net return per acre	22.12	-53.50	7.96	90.94
Government payments	18.18	14.02	16.00	25.24
Net return with govt pmts Labor & management charge	40.30 21.58	-39.48 20.83	23.95 18.35	116.18 24.00
Net return over lbr & mgt	18.72	-60.31	5.60	92.18
Cost of Production				
Total direct expense per bu.	4.13	6.54	4.52	3.00
Total dir & ovhd exp per bu. Less govt & other income	5.27 4.62	8.21 6.82	5.62 4.89	3.93 3.47
With labor & management	5.00	7.34	5.24	3.83
-			5.34	5.21
Net value per unit Machinery cost per acre	5.33 71.98	5.84 87.00	5.34 60.40	5.21 62.81
Est. labor hours per acre	0.98	0.82	0.99	0.93
•				

Wheat, Spring on Share Rent

	Avg. Of All Farms
Number of farms	7
Acres Yield per acre (bu.) Operators share of yield % Value per bu. Total product return per acre Other crop income per acre Gross return per acre	241.91 53.03 70.67 5.13 192.24 7.69 199.94
Direct Expenses Seed and plants Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Operating interest Miscellaneous Total direct expenses per acre Return over direct exp per acre	11.68 59.88 21.74 9.71 9.93 17.00 25.49 2.65 2.34 160.42 39.52
Overhead Expenses Hired labor Machinery leases Building leases Farm insurance Utilities Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total dir & ovhd expenses per acre Net return per acre	8.08 0.40 0.54 3.87 2.69 2.25 21.20 3.29 42.32 202.74 -2.80
Government payments Net return with govt pmts Labor & management charge Net return over lbr & mgt	6.79 3.99 17.49 -13.50
Cost of Production Total direct expense per bu. Total dir & ovhd exp per bu. Less govt & other income With labor & management	4.28 5.41 5.02 5.49
Net value per unit Machinery cost per acre Est. labor hours per acre	5.13 74.59 1.22

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 -- Whole Herd w/backgrounding -- Average Per Cwt. Produced

	Avg. Of All Farms	
Number of farms		14
Beef Calves sold (lb) Transferred out (lb) Cull sales Insurance income Government payments Other income Purchased Transferred in Inventory change Gross margin	Quantity 84.64 6.78 -	Value 123.88 9.90 13.45 0.82 0.98 0.08 -16.85 -6.96 18.42 143.73
Direct Expenses Protein Vit Minerals (lb.) Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass (lb.) Pasture (aum) Stover (lb.) DDGS, dry (lb.) Other feed stuffs (lb) Veterinary Supplies Fuel & oil Repairs Custom hire Marketing Total direct expenses Return over direct expense	32.36 1.51 547.75 133.36 908.55 1.11 76.70 62.09 52.67	15.28 4.59 7.55 4.64 26.03 20.54 1.76 1.37 5.71 5.53 4.83 5.27 3.42 2.11 109.97 33.75
Overhead Expenses Farm insurance Interest Mach & bldg depreciation Miscellaneous Total overhead expenses Total dir & ovhd expenses Net return		1.76 2.33 5.81 4.35 14.25 124.22 19.50
Labor & management charge Net return over lbr & mgt		11.64 7.87
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		109.97 124.22 128.15 139.79
Est. labor hours per unit		0.74
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.		173.8 97.2 3.7 8.5 93.7 89.7 0.78 3.0 0.8 519 465 506.03 716 146.37

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 Insurance income Government payments Other income Purchased Transferred in Inventory change Gross margin	Quantity 515.4 41.3	Value 754.43 60.32 81.92 5.02 5.98 0.49 -102.61 -42.42 112.16 875.30
Direct Expenses Protein Vit Minerals (lb.) Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass (lb.) Pasture (aum) DDGS, dry (lb.) Other feed stuffs (lb) Veterinary Supplies Fuel & oil Repairs Custom hire Marketing Total direct expenses Return over direct expense	197.1 9.2 3,335.8 812.2 5,533.1 6.8 378.1 787.9	93.04 27.96 46.01 28.23 158.52 125.11 8.14 19.04 34.79 33.69 29.44 32.09 20.82 12.87 669.73 205.56
Overhead Expenses Farm insurance Interest Mach & bldg depreciation Miscellaneous Total overhead expenses Total dir & ovhd expenses Net return		10.70 14.21 35.41 26.46 86.78 756.52 118.78
Labor & management charge Net return over lbr & mgt		70.87 47.91
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		109.97 124.22 128.15 139.79
Est. labor hours per unit		4.53
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.		173.8 97.2 3.7 8.5 93.7 89.7 0.78 3.0 0.8 519 465 506.03 716 146.37

Beef Replacement Heifers -- Average Per Head

	Avg. Of All Farms	
Number of farms		6
Beef Replace sold (hd) Transferred out (hd) Government payments Purchased (hd) Transferred in (hd) Inventory change (hd) Gross margin	Quantity 0.37 0.54 0.24 0.28 -0.40	Value 583.71 854.74 22.52 -245.08 -267.29 -297.28 651.31
Direct Expenses 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 Hired labor Bedding Total direct expenses Return over direct expense	34.47 1.93 1,508.87 189.47 2,213.59 4.79 170.47 66.84	6.03 5.28 25.64 7.58 64.17 87.00 10.66 7.51 10.89 18.60 6.42 4.97 10.74 8.77 1.86 6.12 282.23 369.08
Overhead Expenses Hired labor Farm insurance Dues & professional fees Mach & bldg depreciation Miscellaneous Total overhead expenses Total dir & ovhd expenses Net return		14.57 7.69 6.76 21.38 10.80 61.21 343.43 307.87
Labor & management charge Net return over lbr & mgt		25.89 281.98
Est. labor hours per unit		1.51
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		29 50 55 2.3 213.86 235.46

Beef Replacement Heifers -- Average Per Head Sold/Trans

	Avg. Of All Farms	
Number of farms	6	
Beef Replace sold (hd) Transferred out (hd) Government payments Purchased (hd) Transferred in (hd) Inventory change (hd) Gross margin	Quantity 0.4 0.6 0.3 -0.4	Value 642.66 941.06 24.79 -269.83 -294.29 -327.30 717.08
Direct Expenses 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 Hired labor Bedding Total direct expenses Return over direct expense	38.0 2.1 1,661.3 208.6 2,437.1 5.3 187.7 73.6	6.64 5.82 28.23 8.34 70.65 95.78 11.73 8.26 11.99 20.48 7.07 5.47 11.82 9.66 2.05 6.74 310.73 406.35
Overhead Expenses Hired labor Farm insurance Dues & professional fees Mach & bldg depreciation Miscellaneous Total overhead expenses Total dir & ovhd expenses Net return		16.04 8.46 7.45 23.54 11.89 67.39 378.12 338.96
Labor & management charge Net return over lbr & mgt		28.50 310.46
Est. labor hours per unit		1.67
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		29 50 55 2.3 213.86 235.46

Figure 1. Gross Cash Income Per Farm

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

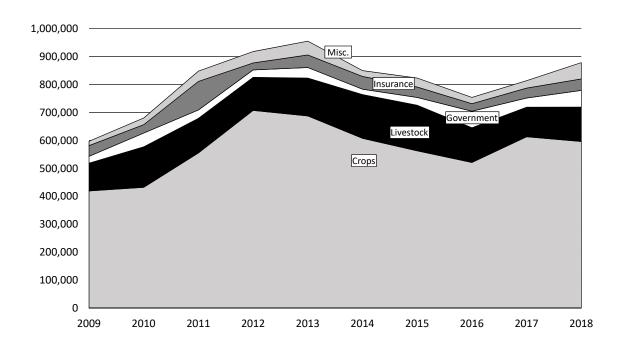


Figure 2. Net Farm Income (Accrual) Per Farm

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

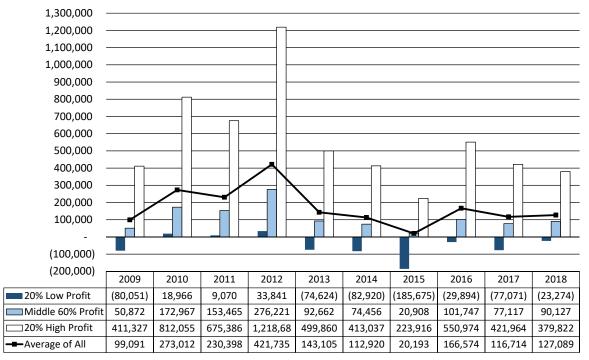


Figure 3. Financial Efficiency Measures (As Percent of Gross Revenue)

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

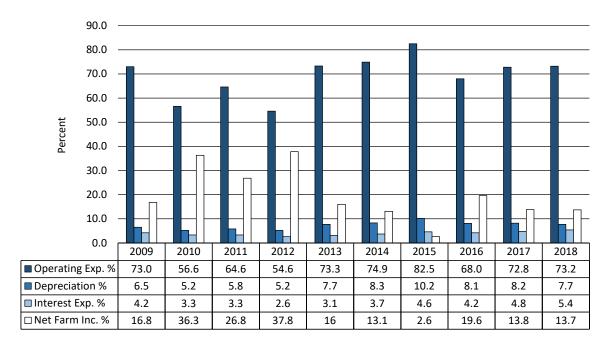


Figure 4. Profitability Measures Per Farm

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

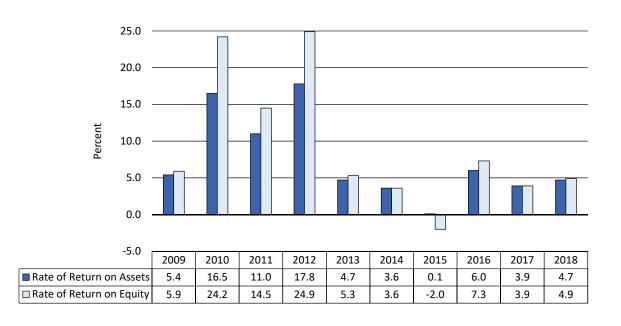


Figure 5. Assets and Liabilities Per Farm, 2018

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

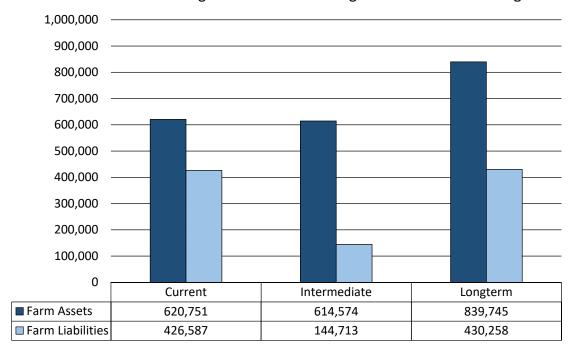


Figure 6. Total Farm Assets and Liabilities

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

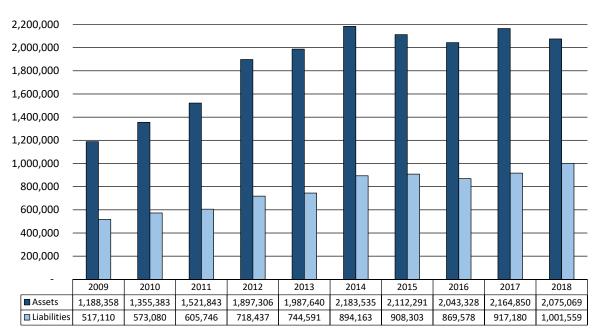


Figure 7. Household and Personal Expenses

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

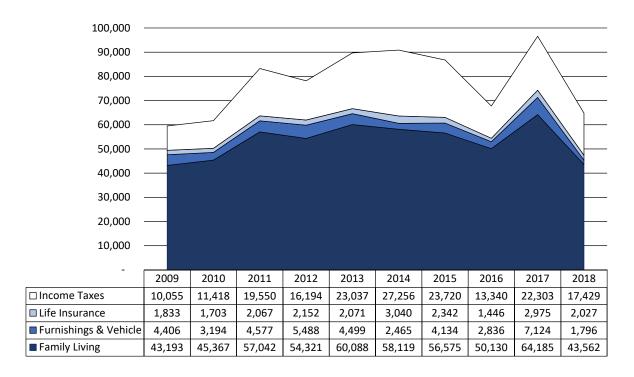


Figure 8. Crop Acreage Per Farm

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

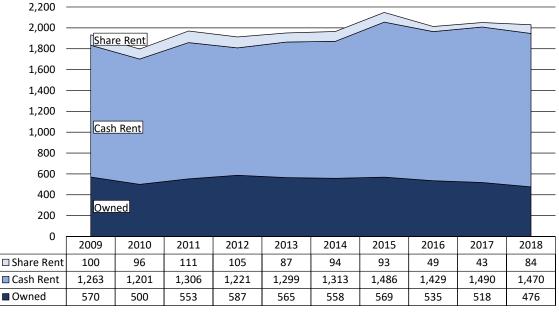


Figure 9. Spring Wheat Costs Per Acre

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

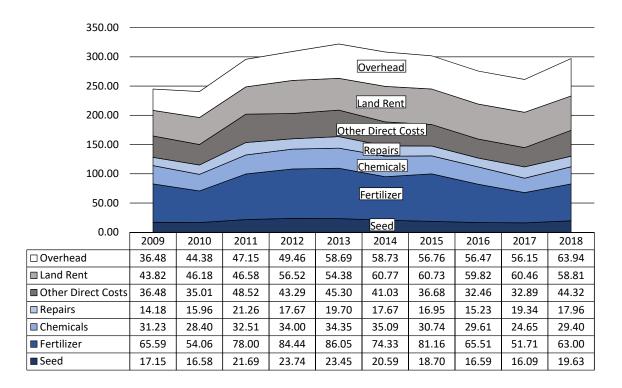
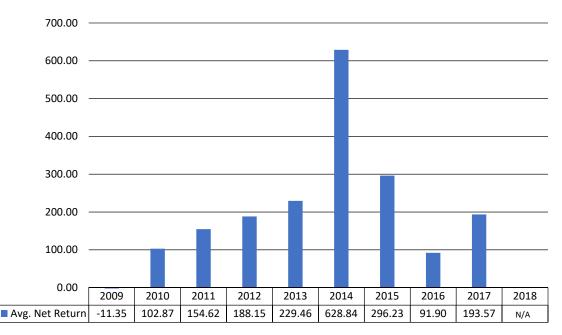


Figure 10. Average Net Return Per Beef Cow

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



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