



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Financial Characteristics of Record-keeping and Average Farms in North Dakota

Cole R. Gustafson, Elizabeth G. Nielsen, and Mitchell J. Morehart



SB
205
.57
N64
no.
245

Department of Agricultural Economics • North Dakota State University
Fargo, ND 58105

Acknowledgments

This report represents the culmination of a cooperative research project involving numerous organizations and individuals. Our appreciation is expressed first to the Rural Rehabilitation Corporation for partial funding of the study.

Next, we would like to recognize the organizations which provided the vast amount of data necessary for this research effort. The Economic Research Service of the U.S. Department of Agriculture provided data from the annual Farm Cost and Returns Survey (FCRS), computer time and expertise which greatly facilitated the analysis. Larry Helt and the Farm Business Management Education (FBME) program graciously provided record data from their farm management organization and Gary Rourke assisted with tabulations of the FBME data.

A special thanks goes to the 500 members of the FBME program and the more than 300 farmers who voluntarily participated in the FCRS survey. Without their assistance and cooperation, this study would not have been possible.

Finally, we would like to thank James Johnson and Roger Johnson for their comments on earlier drafts of the manuscript and Marna Unterseher and Shelly Swandal who did an excellent job of typing this lengthy report.

This report was prepared from a study conducted as part of North Dakota Station project ND01380, Financing Agriculture in a Changing Environment: Macro, Market, Policy and Management Issues.

Table of Contents

	Page
<i>Highlights</i>	ix
PREVIOUS STUDIES	2
PROCEDURE	3
Random Survey Dataset	3
North Dakota Farm Management Association Dataset	4
Data Adjustments	4
RESULTS	5
Land and Labor Resources	5
Capital Investment	6
Expenses	6
Income	7
Equity	7
Profitability	8
CONCLUSION	9
REFERENCES	10
APPENDIX 1. Definitions of Class Variables and Table Items	11
APPENDIX 2. Financial Comparisons of Record-keeping and Average Farms in North Dakota	17

List of Tables

Table		Page
1	PROFITABILITY CHARACTERISTICS	8

List of Appendix Tables

A1	FARMS AND LAND IN FARMS, ALL CLASSES, NORTH DAKOTA, 1986	18
A2	FARMS AND LAND IN FARMS BY ECONOMICS CLASS, NORTH DAKOTA, 1986, LESS THAN \$40,000	18
A3	FARMS AND LAND IN FARMS BY ECONOMICS CLASS, NORTH DAKOTA, 1986, \$40,000 TO \$249,000	19
A4	FARMS AND LAND IN FARMS BY ECONOMICS CLASS, NORTH DAKOTA, 1986, \$250,000 AND MORE	19
A5	FARMS AND LAND IN FARMS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, CASH GRAIN	20
A6	FARMS AND LAND IN FARMS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, BEEF, HOG, OR SHEEP	20
A7	FARMS AND LAND IN FARMS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, ALL OTHER LIVESTOCK	21
A8	FARMS AND LAND IN FARMS BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986	21
A9	FARMS AND LAND IN FARMS BY ACRES OPERATED, NORTH DAKOTA, 1986, 500 ACRES OR LESS	22
A10	FARMS AND LAND IN FARMS BY ACRES OPERATED, NORTH DAKOTA, 1986, 501 TO 1,000 ACRES	22
A11	FARMS AND LAND IN FARMS BY ACRES OPERATED, NORTH DAKOTA, 1986, 1,000 ACRES OR MORE	23
A12	FARMS AND LAND IN FARMS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT	23
A13	FARMS AND LAND IN FARMS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.40	24
A14	FARMS AND LAND IN FARMS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70	24
A15	FARMS AND LAND IN FARMS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.71 OR MORE	25

List of Appendix Tables

Table		Page
A16	FARM LABOR AND WAGES, ALL CLASSES, NORTH DAKOTA, 1986	25
A17	FARM LABOR AND WAGES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, LESS THAN \$40,000	26
A18	FARM LABOR AND WAGES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$40,000-\$249,999	26
A19	FARM LABOR AND WAGES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$250,000 AND MORE	27
A20	FARM LABOR AND WAGES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, CASH GRAIN	27
A21	FARM LABOR AND WAGES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, BEEF, HOG, OR SHEEP	28
A22	FARM LABOR AND WAGES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, ALL OTHER LIVESTOCK	28
A23	FARM LABOR AND WAGES BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986	29
A24	FARM LABOR AND WAGES BY ACRES OPERATED, NORTH DAKOTA, 1986, 250 ACRES OR LESS	29
A25	FARM LABOR AND WAGES BY ACRES OPERATED, NORTH DAKOTA, 1986, 501-1,000 ACRES	30
A26	FARM LABOR AND WAGES BY ACRES OPERATED, NORTH DAKOTA, 1986, 1,000 ACRES OR MORE	30
A27	FARM LABOR AND WAGES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT	31
A28	FARM LABOR AND WAGES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.40	31
A29	FARM LABOR AND WAGES BY DEBT/ASSET RATIO, NORTH DAKOTA 1986, 0.41-0.70	32
A30	FARM LABOR AND WAGES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.71 OR MORE	32
A31	CAPITAL INVESTMENTS AND IMPROVEMENTS, ALL CLASSES, NORTH DAKOTA, 1986	33
A32	CAPITAL INVESTMENTS AND IMPROVEMENTS BY ECONOMIC CLASS, NORTH DAKOTA, 1986, LESS THAN \$40,000	33

List of Appendix Tables

Table		Page
A33	CAPITAL INVESTMENTS AND IMPROVEMENTS BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$40,000-\$249,999	34
A34	CAPITAL INVESTMENTS AND IMPROVEMENTS BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$250,000 AND OVER	34
A35	CAPITAL INVESTMENTS AND IMPROVEMENTS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, CASH GRAIN	35
A36	CAPITAL INVESTMENTS AND IMPROVEMENTS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, BEEF, HOG, OR SHEEP	35
A37	CAPITAL INVESTMENTS AND IMPROVEMENTS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, ALL OTHER LIVESTOCK	36
A38	CAPITAL INVESTMENTS AND IMPROVEMENTS BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986	36
A39	CAPITAL INVESTMENTS AND IMPROVEMENTS BY ACRES OPERATED, NORTH DAKOTA, 1986, 500 ACRES OR LESS	37
A40	CAPITAL INVESTMENTS AND IMPROVEMENTS BY ACRES OPERATED, NORTH DAKOTA, 1986, 500-1,000 ACRES	37
A41	CAPITAL INVESTMENTS AND IMPROVEMENTS BY ACRES OPERATED NORTH DAKOTA, 1986, 1,000 ACRES OR MORE	38
A42	CAPITAL INVESTMENTS AND IMPROVEMENTS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT	38
A43	CAPITAL INVESTMENTS AND IMPROVEMENTS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.04	39
A44	CAPITAL INVESTMENTS AND IMPROVEMENTS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70	39
A45	CAPITAL INVESTMENTS AND IMPROVEMENTS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.71 OR MORE	40
A46	FARM OPERATING EXPENSES, ALL CLASSES, NORTH DAKOTA, 1986	40
A47	FARM OPERATING EXPENSES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, LESS THAN \$40,000	41
A48	FARM OPERATING EXPENSES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$40,000-\$249,000	41
A49	FARM OPERATING EXPENSES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$250,000 OR MORE	42

List of Appendix Tables

Table		Page
A50	FARM OPERATING EXPENSES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, CASH GRAIN	42
A51	FARM OPERATING EXPENSES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, BEEF, HOG, OR SHEEP	43
A52	FARM OPERATING EXPENSES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, ALL OTHER LIVESTOCK	43
A53	FARM OPERATING EXPENSES BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986	44
A54	FARM OPERATING EXPENSES BY ACRES OPERATED, NORTH DAKOTA, 1986, 500 ACRES OR LESS	44
A55	FARM OPERATING EXPENSES BY ACRES OPERATED, NORTH DAKOTA, 500-1,000 ACRES	45
A56	FARM OPERATING EXPENSES BY ACRES OPERATED, NORTH DAKOTA, 1986, 1,000 ACRES OR MORE	45
A57	FARM OPERATING EXPENSES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT	46
A58	FARM OPERATING EXPENSES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.40	46
A59	FARM OPERATING EXPENSES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70	47
A60	FARM OPERATING EXPENSES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.71 OR MORE	47
A61	FARM AND NONFARM INCOME SOURCES, ALL CLASSES, NORTH DAKOTA, 1986	48
A62	FARM AND NONFARM INCOME SOURCES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, LESS THAN \$40,000	48
A63	FARM AND NONFARM INCOME SOURCES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$40,000-\$249,999	49
A64	FARM AND NONFARM INCOME SOURCES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$250,000 OR MORE	49
A65	FARM AND NONFARM INCOME SOURCES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, CASH GRAIN	50
A66	FARM AND NONFARM INCOME SOURCES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, BEEF, HOG, OR SHEEP	50

List of Appendix Tables

Table		Page
A67	FARM AND NONFARM INCOME SOURCES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, ALL OTHER LIVESTOCK	51
A68	FARM AND NONFARM INCOME SOURCES BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986	51
A69	FARM AND NONFARM INCOME SOURCES BY ACRES OPERATED, NORTH DAKOTA, 1986, 500 ACRES OR LESS	52
A70	FARM AND NONFARM INCOME SOURCES BY ACRES OPERATED, NORTH DAKOTA, 1986, 501-1,000 ACRES	52
A71	FARM AND NONFARM INCOME SOURCES BY ACRES OPERATED, NORTH DAKOTA, 1986, 1,000 ACRES OR MORE	53
A72	FARM AND NONFARM INCOME SOURCES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT	53
A73	FARM AND NONFARM INCOME SOURCES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.40	54
A74	FARM AND NONFARM INCOME SOURCES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70	54
A75	FARM AND NONFARM INCOME SOURCES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.71 OR MORE	55
A76	FARM BUSINESS ASSETS AND LIABILITIES, ALL CLASSES, NORTH DAKOTA, 1986	55
A77	FARM BUSINESS ASSETS AND LIABILITIES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, LESS THAN \$40,000	56
A78	FARM BUSINESS ASSETS AND LIABILITIES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$40,000-\$249,999	56
A79	FARM BUSINESS ASSETS AND LIABILITIES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$250,000 OR MORE	57
A80	FARM BUSINESS ASSETS AND LIABILITIES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, CASH GRAIN	57
A81	FARM BUSINESS ASSETS AND LIABILITIES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, BEEF, HOG, OR SHEEP	58
A82	FARM BUSINESS ASSETS AND LIABILITIES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, ALL OTHER LIVESTOCK	58
A83	FARM BUSINESS ASSETS AND LIABILITIES BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986	59

List of Appendix Tables

Table		Page
A84	FARM BUSINESS ASSETS AND LIABILITIES BY ACRES OPERATED, NORTH DAKOTA, 1986, 500 ACRES OR LESS	59
A85	FARM BUSINESS ASSETS AND LIABILITIES BY ACRES OPERATED NORTH DAKOTA, 1986, 501-1,000 ACRES	60
A86	FARM BUSINESS ASSETS AND LIABILITIES BY ACRES OPERATED, NORTH DAKOTA, 1986, 1,000 OR MORE	60
A87	FARM BUSINESS ASSETS AND LIABILITIES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT	61
A88	FARM BUSINESS ASSETS AND LIABILITIES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.0-1-0.40	61
A89	FARM BUSINESS ASSETS AND LIABILITIES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70	62
A90	FARM BUSINESS ASSETS AND LIABILITIES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.71 OR MORE	62

Highlights

Participation in a farm management association enhances members' recordkeeping abilities and provides standards of performance to measure achievement. These data are also used extensively in applied economic studies. However, results of these applied studies can only be generalized to broader populations of farmers if members of the farm management association are a representative sample.

This study compares the economic performance and financial characteristics of North Dakota farmers belonging to the Farm Business Management Education (FBME) recordkeeping program and those randomly surveyed in the U.S. Department of Agriculture's Farm Costs and Returns Survey (FCRS).

FBME members are found to have significantly different financial characteristics as compared to average farmers in the state. FBME farms have substantially more acreage, hired labor, gross income, expenses, assets and liabilities. Equity levels on recordkeeping farms are higher but profitability and returns to equity are statistically lower. Nonfarm income is lower on FBME farms. Similar results were obtained after firms were adjusted for variations in farm size, enterprises and leverage. These results imply a need to exercise caution when inferences are drawn from studies utilizing farm management association recordkeeping data.

Another implication of the study's findings is that farm management association members may benefit by comparing the performance of their firm with other groups of farmers in addition to making comparisons with members of their own association. Farm management recordkeeping associations yield important information on which to base firm level comparisons of financial performance. However, this source of information is of less value if it is biased or is based on farms with different characteristics than average.

Financial Characteristics of Record-keeping and Average Farms in North Dakota

Cole R. Gustafson, Elizabeth G. Nielsen, and Mitchell J. Morehart^{*}

Farmers maintain financial records for a variety of reasons including report filing, planning and resource management. The preferred design of farm accounting systems and the manner in which desired reports are presented varies considerably among farmers (Schnitkey and Sonka). Yet, many farmers choose to maintain standardized records as part of a farm management association (FMA). Benefits of participating in a farm management record keeping association are two fold. First, comprehensive association reports yield more information than members would likely collect on an individual basis. Secondly, because local associations are comprised of relatively homogeneous firms, members can readily compare the performance of their farm with those of their peers.

FMA data are also utilized extensively by researchers in agricultural economics. They are an important source of data on local resource endowments, production practices, purchasing and marketing patterns. Each member's data are uniformly gathered and compiled according to well documented and consistent methodologies. In addition, trained staff review the data and summary statistics in an effort to improve accuracy.

However, FMA data are not obtained through random sample. The limitation of using biased sample data in applied agricultural economics research is obvious. Results of studies utilizing biased data can not be inferred to a larger population of farm units with any statistical confidence. Thus, if the membership of a FMA truly differs from a random sample, researchers face a dilemma as they can no longer rely on FMA data for local information. National surveys rarely contain sufficient detail and random sampling is prohibitively expensive in most situations.

The purpose of this paper is to compare the financial characteristics of North Dakota farmers who belong to a FMA with those of a random sample. Statistical tests are performed to see if the two populations truly differ or if differences only result from the sampling process. The next section discusses previous studies that have investigated the characteristics of farmers belonging to FMAs. Following is a description of the procedures and datasets used in this study -- the North Dakota Farm Business Management Education (FBME) program and the USDA Farm Cost and Returns Survey (FCRS). The third section describes modifications to each dataset in order to facilitate comparisons. Results of the comparisons are presented in the fourth section.

^{*}Gustafson is assistant professor, Dept. of Agricultural Economics, North Dakota State University, Fargo. Nielsen and Morehart are agricultural economists, Economic Research Service, U.S. Dept. Of Agriculture, Washington, D.C.

PREVIOUS STUDIES

Gustafson, Koenigstein and Lins, and Mueller each compared the financial characteristics of a random sample of Illinois farmers with members of the Illinois Farm Business Farm Management (FBFM) record keeping association. FBFM is jointly sponsored by the University of Illinois Cooperative Extension Service and the Department of Agricultural Economics. Business records on 7,000 Illinois farms are obtained annually (Koenigstein and Lins).

In the earliest study, Mueller compared a sample of 210 FBFM cooperators with a random sample of 175 farmers, each from a six-county area of western Illinois. Firms enrolled in FBFM were found to be of larger size, located on higher quality soils and have managers with greater ability as measured by various financial ratios. However, after controlling for firm size and soil quality, few differences were found between the two samples:

"... in comparing the two groups of farms . . . we see that the input of labor is nearly identical. The input of capital items at the end of the year was not greatly different. Efficiency of management on the two groups of farms, as measured by net management earnings, labor management earnings, rate earned on investment, total return per dollar of inputs and net management returns per dollar of non-feed inputs did not indicate any evidence of a significant difference in managerial ability between the two groups of farmers." (p.290)

"These observations lead us to the conclusion that differences between record-keeping farms and a representative sample of all farms are essentially differences in the quantity of basic resources, particularly land and capital, utilized by the farm operators . . . and, given equal basic resources, managerial ability is not greatly different on record-keeping farms and survey farms." (p.292)

Several researchers (Gustafson; Koenigstein and Lins) each relied on USDA's Farm Cost and Returns Survey (FCRS) as the source of random sample data. Gustafson investigated the machinery investment behavior of a sample of FBFM cooperators in the central portion of the state and found few statistically significant differences in leverage, tenure and machinery complement variables defining the structural characteristics of farms in two samples. Koenigstein and Lins, like Mueller, found few differences among comparatively sized farms although numerous omissions in the FCRS balance sheet were found to underestimate the true net worth of farm operators. However, Koenigstein and Lins compared FBFM data to unweighted FCRS sample data, not the expanded estimates reflective of the survey population. This limits the implications of their study because FCRS sample data have no meaning without appropriate weighting.

Results of these studies indicate a very close relationship between FMA and survey data obtained through random sample. But, inferring the results of these studies to FMAs in other states is questionable because a large proportion of Illinois farmers participate in FBFM. In 1987, one out every

five farms over 500 acres participated in FBFM. Thus, sampling from FBFM is very close to obtaining data from a random sample of all Illinois farmers.

Participation in other FMAs is not as high. For example, in North Dakota, less than 2 percent of the farmers are enrolled in a statewide FMA program. It is more likely differences from a random sample occur in smaller programs, particularly if they cater to specific clientele.

PROCEDURE

This study compares the characteristics of farmers belonging to a FMA in North Dakota and those randomly surveyed in USDA's Farm Costs and Returns survey. Both datasets are for 1986 -- the most current data available at the time of the analysis.

Variables in each dataset had to be redefined and re-estimated so that comparisons of each dataset could be made. The following discussion describes each of the two datasets and modifications that were necessary to facilitate comparison.

Random Survey Dataset

The random survey data for this study were obtained from the 1986 FCRS conducted in Spring of 1987 by the National Agricultural Statistics Service (Nielsen and Morehart). FCRS is an integrated survey designed to obtain data for state and national farm income, balance sheet, productivity and cost of production accounts. Sufficient data are collected to analyze the distribution of key financial variables and the well-being of farmers with different structural characteristics.

FCRS is a complex list and area frame probability-based survey. The list frame contains names of known operators stratified by economic size and other attributes. As the majority of economic activity in the farm sector is accounted for by a relatively small proportion of operations, it is more efficient to sample these large operators with a list frame. The area frame samples from all land segments in a state according to land use type with equal probability. It supplements and accounts for voids in the list frame.

Respondents to the survey are screened to insure that their operation sold or purchased \$1,000 worth of agricultural products or inputs for agricultural production. Because FCRS is a probability based sample, each respondent represents a number of farm operations with similar characteristics. In 1986, nearly 25,000 survey contacts were made in the United States. Those contacts represent an expanded number of survey farms of 1.57 million nationwide. In North Dakota, 307 farms were surveyed and expanded to represent 24,742 farms in the state.

Six questionnaires were used to elicit the detailed whole farm and enterprise specific data. Information included financial characteristics, expenses, receipts, resource base, production practices and operator characteristics such as age, primary occupation, and nonfarm income.

The questions were asked by trained enumerators. After the data were collected, they were reviewed by personnel at both state and national levels and computer edited to insure accuracy.

North Dakota Farm Management Association Dataset

FMA data for North Dakota were obtained from the Farm Business Management Education (FBME) Program. The educational program is available to farm/ranch families enrolled in adult farm management courses offered by public high schools, vocational-technical centers and post secondary state colleges. In 1986, nearly 500 farms participated at 32 schools statewide. All clients pay an annual fee to cover clerical costs, data processing fees and publication of an annual report.

Each member of the program maintains a farm account book. At the end of the year, totals for each account are transferred to standardized input sheets and processed at a central facility. An annual report compares the performance of the cooperator's farm with the average of all clients and the 20 percent of operations that are most and least profitable (Helt).

Clients maintain data for both the whole farm and operator's share of the business as well as the operator's household. Sufficient data are elicited to provide clients with comprehensive income, balance sheet, statement of changes in financial position, enterprise and household statements.

Data Adjustments

The FCRS and FBME datasets differ in a number of important areas. First, FCRS randomly samples from the entire population of North Dakota farmers. The FBME dataset used in this analysis excludes the following counties comprising the Red River Valley of North Dakota -- Cass, Grand Forks, Pembina, Traill, and Walsh. Investment and income levels on Red River Valley farms are typically higher than those located in the remainder of the state. These counties are excluded from the FCRS dataset so comparable measures of financial performance would result.

Secondly, each dataset is designed for a unique purpose -- FCRS provides annual information about farm operator financial performance in addition to the data necessary for estimation of sector level financial statements. FBME's data on the other hand assists cooperators with firm level decision-making. FCRS must be general enough to elicit data from all of the heterogeneous farms nationwide. On the other hand, FBME obtains considerable detail because cooperator farms comprising the system are more uniform and FBME places more emphasis on production and management information.

Because each data set contains unique data, variable definitions and methods of calculation, direct comparison of summary statistics and many individual financial variables from each set is impossible. So that such comparisons could be reasonably made, financial variables and summary

statistics for each dataset were recomputed according to a hybrid, but consistent, methodology.

The methodology most closely aligns with USDA's procedure because FCRS does not elicit the considerable detail required to reproduce FBME statistics. The variables, classification schemes and procedures for deriving the FCRS data in this report are shown in Appendix 1 (Nielsen and Morehart). Deviations from this procedure in constructing FBME estimates include computation of inventory change based on the difference in value of ending stocks was calculated for FBME and included as gross revenue. Also, dwelling rental value was imputed for FBME data. Various crop and livestock expense components were aggregated into other crop and other livestock expense categories because FBME data were not of sufficient detail. Because FBME does not collect information on interest paid by farms, both real estate and operating credit were estimated by multiplying outstanding debt by a weighted average (based on market share) of Farm Credit System and Farmers Home Administration interest rates.

Numerous other income, expense, asset and liability variables were merged and/or reestimated. For example, livestock, machine and custom work repairs are individually collected by FBME but elicited as a single item in the FCRS survey. Such differences are not expected to bias overall totals.

All summary measures of firm performance including profitability, liquidity, solvency and efficiency align with USDA definitions.

Koenigstein and Lins identify 11 categories of assets and 5 categories of liabilities which are omitted in the USDA balance sheet and lead to a slight understatement of net worth. These biases still exist in the results of this study since USDA definitions form a base. Further, because FCRS definitions were also slightly altered, results of this study likely differ with other North Dakota data published by USDA.

RESULTS

The FCRS and FBME datasets are based on 307 and 496 farm observations in North Dakota, respectively. When weighted and expanded to the state level, the FCRS observations represent 24,472 North Dakota farms. Detailed comparisons of the two datasets are provided in Appendix 2, Tables 1-90. The following discussion summarizes the land and labor resources, capital investments, expenses, incomes, equity and profitability of the two groups.

Land and Labor Resources

Over 86 percent of North Dakota farmers own a portion of the land they operate (Appendix 2, Table 1). The average North Dakota farmer operates 1,315 acres while FBME members operate significantly larger farms (1,540 acres). Even after standardizing the farms for gross sales, enterprises, and leverage, FBME members consistently operate larger than average farms based on acreage (Appendix 2, Tables 2-15). Livestock farms contain more acreage than crop farms due to larger acreages of pasture. A positive relationship exists

between acreage and gross sales. Land operated by FBME farmers increases with a farm's debt to asset ratio at first but then declines when the debt to asset ratio exceeds .70. Finally, nearly all of the FBME farmers (97 percent) rent at least some land. According to FCRS, 18,625 or 76 percent rent some land.

A substantially higher percentage of FBME farmers paid cash wages to hired labor than the average North Dakota farmer, 92 versus 52 percent respectively (Appendix 2, Table 16). In addition, of those farmers reporting to have paid cash wages, cash wages paid by FBME members averaged \$8,529 whereas farmers in the FCRS survey reported paying \$4,807 during 1986. Most of the difference occurred on farms with gross sales less than \$250,000. Beyond that level, differences in cash wages paid were insignificant (Appendix 2, Tables 17-19). Also, FBME grain farms paid \$5,157 more in cash wages than the average grain farm whereas beef, hog, and sheep farmers paid \$1,326 less (Appendix 2, Tables 20-21). Interestingly, the highest amount of hired labor occurred on farms with debt to asset ratios between .01 and .40. As leverage increases, wages paid to hired labor declined.

Capital Investment

New capital investment by FBME members was significantly lower than the average North Dakota farmer (Appendix 2, Table 31). In 1986, FBME members invested \$12,364 in new equipment while the average farmer invested \$14,453. However, maintenance and repairs on FBME farms were significantly greater, \$10,266 versus \$6,756. The latter trend is consistent across farm size, gross sales, enterprise and leverage classifications (Appendix 2, Tables 32-45).

Expenses

FBME members had significantly higher expenses than average farmers across the state (Appendix 2, Table 46). Total farm expenses were 85 percent more on recordkeeping farms. With the exception of feed and general business expenses, all individual expense components were statistically higher. With regard to frequency, FBME members were more likely to have expenses for hired labor, custom hired work, and cash rent.

FBME and FCRS members had nearly identical cost structures when gross sales exceeded \$250,000 (Appendix 2, Table 49). But, significant differences in expense levels arose on midsize and smaller farms. On small farms in particular, expenses on FBME farms were typically four to five times higher. Sampling differences may explain the large difference in this sales category. FCRS includes all farms that sold \$1,000 worth of agricultural products or spent at least \$1,000 on farm inputs. Many of these smaller operations may not justify participating in the FBME program due to enrollment fees. Hence, larger FBME farms may dominate the smallest sales category.

Livestock purchases were significantly higher on FBME farms regardless of whether the farm was classified as a cash grain or livestock operation (Appendix 2, Tables 50-52). FBME cash grain farms spent nearly twice as much on livestock as did the average North Dakota cash grain farmer whereas FBME beef, hog, and sheep farms spent over seven times as much.

Farm expenses and debt-to-asset ratios are directly related on North Dakota farms (Appendix 2, Tables 57-60). However, FBME farms with the highest debt-to-asset ratio did not have the highest level of expenses. FBME farms with a debt-to-asset ratios between .41 and .70, had the highest expenses per farm when interest paid was both included and excluded -- indicating the largest FBME farms may not be experiencing the highest degree of financial stress.

Income

Gross cash income from farming sources was 35 percent higher on FBME recordkeeping farms (Appendix 2, Table 61). Ironically, crop income was statistically higher on FBME farms while livestock income was not. Recall livestock purchases were significantly higher on FBME farms in 1986. Further, based on the number of farms reporting, FBME members are more likely to have livestock sales. Total other farm income was similar on FBME and FCRS farms. Nonfarm income was 62 percent less on FBME farms.

Gross cash income reaches a peak on FBME farms with a debt-to-asset ratio of .01-.40 (Appendix 2, Table 73). Beyond that point, gross cash income declines as debt-to-asset ratios increase. On the average North Dakota farm, gross cash income is more correlated with leverage. Nonfarm income is highest for no-debt and high-debt farms. One would expect a correlation between nonfarm income and leverage as financially stressed farms seek off-farm employment to meet cash flow needs.

Equity

FBME farms have 77 percent more assets than their peers in the state (Appendix 2, Table 76). Land, buildings, crop and livestock inventories were significantly higher. But, machinery, equipment, tools and other assets were substantially less.

Nearly all FBME farms had debt whereas only 75 percent of the FCRS farms reported debt. Average reported debt was significantly higher on FBME farms, about 1.5 times more. Still, FBME farms had 70 percent more equity in their operations.

Based on sales classifications, large FBME farms had levels of debt identical to FCRS farms (Appendix 2, Tables 77-79). However, smaller FBME farms had significantly higher liabilities than comparatively sized average farms in North Dakota. Hence, larger FBME farms had significantly higher levels of equity in their operations as compared to their FCRS peers while small farms had approximately equal levels.

FBME farms without debt did not have significantly different levels of assets, liabilities or equity when compared with similar FCRS farms. But FBME farms reporting debt were generally larger in terms of assets, liabilities and equity. FBME farms with the greatest amount of assets had debt-to-asset ratios between .01 and .40. As the debt-to-asset ratio increased above .40, total assets declined in both the FBME and FCRS datasets.

Profitability

Measures of FCRS and FBME firm profitability are shown in Table 1. Even though FBME farms are of larger size and have greater levels of gross farm income, net cash incomes per farm are less than those of comparable FCRS farms. The trend is evident across all farm sizes, production specialties, and leverage positions with the exception of FBME farms having gross sales in excess of \$250,000.

Because FBME farms consist of more assets and equity, rates of return on assets and equity are even less than the average North Dakota farm. In all instances, FBME farms are less profitable than comparable FCRS farms. On average FCRS have a 8.9 percent rate of return on assets while the rate of return on FBME assets is only 2.3 percent.

TABLE 1. PROFITABILITY CHARACTERISTICS

Farm Type	Net Cash Income ^a		Rate of Return On Assets ^b		Rate of Return On Equity ^c	
	FCRS	FBME	FCRS	FBME	FCRS	FBME
All Farms	17,201	-7,039	0.09	0.02	0.07	-0.02
By Economic Class						
\$250,000 or more	28,069	44,045	0.07	0.06	0.05	0.05
\$40,000-\$250,000	20,205	-7,227	0.09	0.02	0.08	-0.02
Less than \$40,000	5,132	-28,298	0.05	-0.04	0.04	-0.15
By Production Speciality						
Cash grain	13,309	8,020	0.08	0.04	0.05	0.02
Beef, hog, or sheep	21,636	-25,276	0.10	-0.00	0.09	-0.07
Other livestock	30,521	-68,112	0.13	-0.09	0.13	-0.26
By Acres Operated						
500 acres or less	6,174	1,451	0.09	0.05	0.05	0.01
501-1,000 acres	25,448	-6,078	0.12	0.02	0.13	-0.02
More than 1,000 acres	17,454	-8,143	0.07	0.02	0.05	-0.02
By Debt/Asset Ratio						
No debt	11,023	6,561	0.03	0.01	0.03	0.01
.01-.40	28,406	5,873	0.07	0.03	0.06	0.01
.41-.70	11,494	-26,161	0.08	0.01	0.07	-0.10
.71 or more	2,967	-35,069	0.09	0.01	0.93	-1.53

^aCash farm income less expenses.

^bNet farm income plus interest on farm loans divided by total farm assets.

^cNet farm income divided by net worth in farm assets.

CONCLUSION

This study has shown that North Dakota farms participating in a farm management recordkeeping association have significantly different financial characteristics in 1986 as compared to average farmers in the state. Their farms have considerably more acreage, hired labor, expenses, gross income, assets and liabilities. Equity levels on recordkeeping farms are higher but profitability and returns to that equity are substantially lower.

The conclusions of this study are not intended to value farm recordkeeping practices. No information relative to beginning financial positions was available to make such an assessment.

The results do imply a need to exercise caution when inferences from studies utilizing farm management recordkeeping data are drawn. Unlike previous investigations, findings of this study show members of farm recordkeeping associations have unique financial characteristics -- even after adjustments for firm size are made.

Given these differences, farm management association members may benefit by comparing the performance of their firm with other groups of farmers in addition to making comparisons with members of their own association. Farm management recordkeeping associations yield important information on which to base firm level comparisons of financial performance. However, this source of information is of less value if it is biased and based on farms with different characteristics than average.

Results of this study apply only to North Dakota. There is need for other studies which identify the unique characteristics of farm management associations located in different geographic locations. Such studies would benefit from use of a single survey instrument for data collection. The conclusions of this study are limited by the fact that two datasets with diverse accounting methods were used. In addition, relationships developed in this study are likely to vary from year-to-year.

REFERENCES

- Gustafson, Cole R. Investment Behavior of Illinois Cash Grain Farmers: A Simulated Experimental Approach. Ph.D. Dissertation, Department of Agricultural Economics, University of Illinois, 1986.
- Helt, Lawrence, F. North Dakota Farm Management Annual Report, 1986: State Average. Farm Analysis Center, Bismarck State College, Bismarck. 58 pp.
- Koenigstein, Kevin and David Lins. Data Comparisons For Illinois Farms: USDA Versus FBFM. Staff paper 88 E-417. Urbana-Champaign: University of Illinois, Department of Agricultural Economics. August 1988.
- Mueller, A.G. "Comparison of Farm Management Service Farms and a Random Sample of Farms in Western Illinois." J. Farm Econ. 36(1954): 258-292.
- Nielsen, Elizabeth G., and Mitchell J. Morehart. Farm Operating and Financial Characteristics, 1986. Statistical Bulletin #772. Washington, D.C.: USDA, Economic Research Service, 1989.
- Schnitkey, Gary D. and Steven T. Sonka. "Systems Design Procedures for Farm Accounting." Southern Journal of Agricultural Economics. 18(1986):207-213.

Appendix 1

Definitions of Class Variables
and Table Items

Modified FCRS--Definitions
of Class Variables and Table Items¹

CLASS VARIABLES

Economic class - The three economic classes in the tables are \$250,000 or more, \$40,000-\$249,999, and less than \$40,000. These classifications are more aggregate than typical USDA - reported categories due to disclosure problems arising from the limited number of farm operations in North Dakota and depth of this analysis. Farms were categorized according to gross receipts (gross annual sales of crops; livestock, poultry and products; and miscellaneous agricultural products; as well as all Government payments) of the operation. The results then formed the basis for defining economic size.

Production speciality - Farm operations were classified according to farm production specialty which represented the largest portion of gross commodity receipts from their farm operation. They are:

Cash grains: largest portion of farm receipts from wheat, barley, corn, soybeans, and other grains (such as sunflowers, oats, rye, and sorghum).

Beef, hogs, or sheep: largest portion of farm receipts from cattle (except dairy breeding stock), hogs, pigs, sheep, and/or lambs.

All other livestock: any remaining livestock farms (such as dairy and poultry).

Legal organization - Respondents were asked to identify their farm operation as an individual operation, corporation, or partnership. Because of a limited number of corporations, this category was dropped from the analysis.

TABLE ITEMS

Tables 31-45, Capital investments and improvements, 1986

New investment:

Autos and trucks: operator and landlord expenditures for the farm share of new purchases of autos, trucks, and pick-ups (minus trade-ins, rebates, or discounts).

Tractors: operator and landlord expenditures for tractors minus trade-ins, rebates, or discounts.

Other farm machinery: operator and landlord expenditures for farm machinery, implements, or equipment other than tractors, including tillage, planting,

¹These variable definitions and classification criteria resemble official USDA, FCRS definitions but have been modified for this study in order to more closely align with FBME definitions.

fertilizing, chemical, harvesting, and haying machinery, and other motor vehicles, machinery, and equipment.

Other capital equipment: operator and landlord expenditures for the farm share of accessory equipment for all motor vehicles and machinery and for farm power shop equipment, capital equipment for livestock and poultry placed on depreciation schedule, and farm office equipment.

Building construction: operator expenditures, including materials, labor, and services, for any farm buildings, mobile homes, storage bins, silos, or homes which were constructed or remodeled.

Fencing: operator expenditures for new construction of fencing.

Other farm construction and improvements: operator expenditures for new construction of land improvements, irrigation improvements for farm or greenhouse, and all other farm/ranch improvements.

Maintenance and repair:

Motor vehicles, farm machinery, and equipment: the farm share of operator and landlord outlays for repairs and replacement parts for all motor vehicles and farm machinery and equipment.

Farm buildings: operator expenditures for the cost of materials for the maintenance and repair of farm buildings including contract services.

Fencing: operator expenditures for maintenance and repair of fencing.

Other farm maintenance and repair: operator expenditures for maintenance and repair of land and irrigation improvements, and all other farm/ranch improvements.

Tables 46-60. Farm operating expenses, 1986

Cattle and calves: operator and landlord expenses for purchases of beef and dairy cows, bulls and replacement heifers, as well as calves and all other cattle.

Hogs and pigs: operator and landlord expenses for purchases of sows, boars, and replacement gilts as well as all other hogs and pigs.

Sheep and lambs: operator and landlord expenses for purchases of sheep and lamb breeding stock as well as all other sheep and lambs.

Poultry: operator and landlord expenses for purchases of broiler chicks, egg-type chicks, starter pullets, layers, and turkeys.

Other livestock: operator and landlord expenses for purchases of other livestock or poultry such as horses, fish, goats, bees, mink, eggs, milk, and wool.

Livestock leased: operator and landlord expenses for renting or leasing livestock.

Livestock and poultry services and supplies: operator and landlord expenses for custom feeding, pasturing, or grazing of livestock; custom processing, grinding, or mixing of feed; bedding, litter, and straw; veterinary supplies and services; and livestock chemicals.

Feed: operator and landlord expenses for purchases of feed grains, hays, forages, mixed or formula feeds, concentrates, supplements, salt, minerals, byproducts, or additives.

Seed: operator expenses for purchases of seeds, plants, and related expenses such as seed cleaning, inoculation, rooting hormones, bagging, germinating, and delinting.

Fertilizer and lime: operator expenses for purchases of commercial chemical fertilizers, lime, and soil conditioners such as manure, gypsum, and humus, including material expenses for noncustom applications and material and application expenses for custom applications.

Pesticides: operator expenses for purchases of pesticides for use on crops, pastures, storage structures, seeds, or seedbeds, including material and application expenses for custom applications.

Fuels and oils: farm share of operator and landlord purchases of diesel, gasoline (both delivered bulk and purchased at a service station), liquid petroleum and natural gas, other fuel (such as fuel oil, kerosene, coal, and wood), and motor oils and fluids.

Autos, trucks, and farm machinery leased: farm share of operator and landlord expenses for rental or lease of autos, trucks, tractors, irrigation equipment, and all other farm equipment.

Containers, transportation, marketing, and storage: operator and landlord expenses for marketing containers and storage and transportation for marketing including drying, cleaning, inspection, baling, bagging, check-off, allotment rentals, and commission fees.

Custom hired work: operator and landlord expenses for custom work such as land tillage, planting or seeding, and harvesting (excluding contract labor, land improvements, and custom hired fertilizer and pesticide applications).

Hired labor: total cash wages including bonuses for all hired workers including family members; expenses of insurance, pensions, and employer's share of social security taxes, workers' compensation, and unemployment compensation; and cash values of furnished lodging, board, and other items.

Contract labor: total expenses for contract labor.

Interest: interest paid on farm real estate debt and operating loans for the farm business.

Taxes: total property taxes paid.

General business: farm share percentage of operator expenses for electricity, telephone, water, and registration and license fees as well as insurance and damages not covered by insurance, irrigation assessments and fees, and other general farm business expenses such as accounting and farm fees, farm office equipment, and soil testing.

Cash rent: total annual cost of cash-rented land.

Miscellaneous: farm share of operator and landlord expenses for repairs and replacement parts for all motor vehicles and farm machinery and equipment (including overhauls, tune-ups, tires, tubes), miscellaneous equipment, hand tools, and supplies; and operator expenditures for maintenance and repair of farm buildings, fencing, irrigation, and land and other farm improvements.

Tables 61-75, Farm and nonfarm income sources, 1986

Crop and livestock sales: the gross value of receipts of all crop or livestock items sold from the farm or ranch, including marketing charges.

Other farm income: cash receipts from services rendered in 1986 including custom work, machine hire, land rented to others, and livestock grazing.

Government farm payments: the gross value of direct government payments (excluding wool and unshorn lamb wool payments) including the face value of commodity (PIK) certificates, plus the premium received from PIK certificates, excluding the landlord's share.

Custom work, machine hire, and wages from other farms: the gross value, excluding the landlord's share, of income received from custom work, machine hire, and wages earned on other farms or ranches.

Net change in CCC loans: the value placed under CCC loans in 1986 less the value of CCC loans repaid, not forfeited.

Custom feeding and grazing: the gross value, excluding the landlord's share, of income from custom feeding or grazing of livestock.

Land rented to others: the total annual cash and share rent received from others.

Other farm-related income: the gross value, excluding the landlord's share, of all farm-related income not included in other categories.

Nonfarm income: the value of nonfarm income the operator and/or spouse and other household members received from:

Nonfarm business: net income earned from businesses other than farms or ranches. Income from farm-related businesses is included only when bookkeeping is maintained apart from the farming operation.

Cash wages: gross cash wages and salaries, tips, commissions, paid bonuses, leave pay, and compensation for corporate officers earned by operators and their households. Does not include wages earned from working on other farms or ranches.

Interest and dividends: interest and dividends from all investments, including any interest from off-farm sources and oil/gas royalties.

Other nonfarm income: all other nonfarm income including nonfarm rental property income, Social Security, and retirement.

Tables 76-90, Farm business assets and liabilities, 1986

Land and buildings owned: the estimated market value on December 31, 1986, of all land and buildings owned in the farm or ranch operation. Includes operator occupied dwelling if it is on the farm or ranch.

Inventories: the current market value of all crops stored on or off the farm, all livestock and poultry, and all purchased seed, feed, fertilizer, chemicals, fuels, and other inputs on hand.

Machinery, tools, and equipment: the farm/ranch share of the market value of all trucks, tractors, farm machinery, tools and equipment, and autos.

Other assets: includes investments in farm cooperatives, bonds, certificates of deposit, savings or checking accounts.

APPENDIX 2

Financial Comparisons of Record-Keeping
and Average Farms in North Dakota

APPENDIX TABLE 1. FARMS AND LAND IN FARMS, ALL CLASSES, NORTH DAKOTA, 1986

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	24,472	--	--	8.88	--	--	--
Land and buildings owned	16,183	20,956	772	9.30	411	762	93.50
Land rented or leased from others 5/	17,268	18,625	927	13.27	478	933	110.36
Cash rented	11,010	14,100	781	19.74	--	--	--
Share rented	6,233	9,873	631	10.99	--	--	--
Land rented or leased to others	1,341	3,307	405	22.65	--	--	--
Land used for pasture	8,859	17,790	498	14.66	315	777*	154.78
Cropland in conservation tillage	2,036	5,642	361	13.86	--	--	--
Cropland removed from production	5,053	21,932	230	19.90	--	--	--
Long-term conservation	92	512	180	39.04	--	--	--
Other Government programs	4,961	21,830	227	20.23	--	--	--
Summer fallow	3,190	16,667	191	19.62	456	227*	87.10
Total land operated 6/	32,173	24,472	1,315	8.88	493	1,540*	78.96

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Number of farms.
- 5/ Data may not add due to exclusion of rent-free acreage.
- 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 2. FARMS AND LAND IN FARMS BY ECONOMICS CLASS, NORTH DAKOTA, 1986, LESS THAN \$40,000

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	5,741	--	--	31.75	--	--	--
Land and buildings owned	2,099	4,161	505	31.75	52	609	79.39
Land rented or leased from others 5/	1,007	2,786	362	28.78	65	470	174.11
Cash rented	537	1,599	336	38.56	--	--	--
Share rented	470	1,831	257	32.93	--	--	--
Land rented or leased to others	d	d	d	--	--	--	--
Land used for pasture	733	3,334	220	43.86	45	465*	83.54
Cropland in conservation tillage	74	768	96	47.30	--	--	--
Cropland removed from production	449	4,911	91	37.17	--	--	--
Long-term conservation	d	d	d	--	--	--	--
Other Government programs	446	4,860	92	37.40	--	--	--
Summer fallow	313	4,194	75	40.72	58	127*	92.86
Total land operated 6/	2,789	5,741	486	25.37	68	915*	91.67

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Number of farms.
- 5/ Data may not add due to exclusion of rent-free acreage.
- 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 3. FARMS AND LAND IN FARMS BY ECONOMICS CLASS, NORTH DAKOTA, 1986, \$40,000 TO \$249,999

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.
		reporting	reporting		reporting	reporting	
		farm 1/	2/		farm 1/	2,3/	
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	17,654	--	--	11.11	--	--	--
Land and buildings owned	12,667	15,847	799	11.34	333	730	77.23
Land rented or leased							
from others 5/	13,879	14,763	940	16.15	384	944	87.2
Cash rented	8,814	11,541	764	24.18	--	--	--
Share rented	5,039	7,472	674	12.60	--	--	--
Land rented or leased to others	965	2,078	465	24.24	--	--	--
Land used for pasture	7,212	13,844	521	17.65	256	752*	123.84
Cropland in conservation tillage	1,812	4,679	387	14.75	--	--	--
Cropland removed from production	4,180	15,944	262	24.01	--	--	--
Long-term conservation	86	410	210	41.50	--	--	--
Other Government programs	4,093	15,893	258	24.47	--	--	--
Summer fallow	2,646	11,939	222	23.16	369	224	79.29
Total land operated 6/	25,622	17,654	1,451	11.11	395	1,533	60.72

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Number of farms.
- 5/ Data may not add due to exclusion of rent-free acreage.
- 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 4. FARMS AND LAND IN FARMS BY ECONOMICS CLASS, NORTH DAKOTA, 1986, \$250,000 AND MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.
		reporting	reporting		reporting	reporting	
		farm 1/	2/		farm 1/	2,3/	
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	1,076	--	--	22.94	--	--	--
Land and buildings owned	1,416	949	1,493	23.93	26	1,478	117.97
Land rented or leased							
from others 5/	2,383	1,076	2,214	26.93	29	1,821	133.78
Cash rented	1,659	960	1,729	31.08	--	--	--
Share rented	723	570	1,269	37.87	--	--	--
Land rented or leased to others	d	d	d	--	--	--	--
Land used for pasture	914	613	1,491	39.84	14	2,235	171.86
Cropland in conservation tillage	d	d	d	--	--	--	--
Cropland removed from production	425	1,076	395	26.35	--	--	--
Long-term conservation	d	d	d	--	--	--	--
Other Government programs	422	1,076	392	26.42	--	--	--
Summer fallow	230	534	431	37.45	29	461	72.89
Total land operated 6/	3,762	1,076	3,495	22.94	30	3,041	95.48

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Number of farms.
- 5/ Data may not add due to exclusion of rent-free acreage.
- 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 5. FARMS AND LAND IN FARMS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, CASH GRAIN

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		farm 1/	2/		farm 1/	2,3/	
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	15,745	--	--	7.72	--	--	--
Land and buildings owned	9,316	13,867	672	8.92	255	635	90.73
Land rented or leased from others 5/	10,584	11,569	915	9.73	298	848	71.45
Cash rented	5,330	8,444	631	12.71	--	--	--
Share rented	5,249	7,473	702	11.74	--	--	--
Land rented or leased to others	908	2,358	385	26.83	--	--	--
Land used for pasture	2,567	9,825	261	13.86	147	356*	105.79
Cropland in conservation tillage	1,765	4,089	432	14.94	--	--	--
Cropland removed from production	3,248	15,102	215	10.78	--	--	--
Long-term conservation	56	410	136	45.44	--	--	--
Other Government programs	3,192	15,000	213	10.86	--	--	--
Summer fallow	2,116	10,977	193	10.92	300	259*	77.78
Total land operated 6/	19,053	15,745	1,210	7.72	306	1,354*	54.71

-- = not applicable or available.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ Number of farms.
 5/ Data may not add due to exclusion of rent-free acreage.
 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 6. FARMS AND LAND IN FARMS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, BEEF, HOG, OR SHEEP

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		farm 1/	2/		farm 1/	2,3/	
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	4,758	--	--	26.05	--	--	--
Land and buildings owned	4,769	3,615	1,319	26.05	117	1,018*	92.63
Land rented or leased from others 5/	4,909	3,888	1,263	40.07	136	1,237	126.88
Cash rented	4,311	2,861	1,507	45.61	--	--	--
Share rented	d	d	d	--	--	--	--
Land rented or leased to others	d	d	d	--	--	--	--
Land used for pasture	4,807	4,505	1,067	24.43	131	1,331	125.25
Cropland in conservation tillage	205	1,329	154	46.82	--	--	--
Cropland removed from production	d	d	d	--	--	--	--
Long-term conservation	d	d	d	--	--	--	--
Other Government programs	d	d	d	--	--	--	--
Summer fallow	d	d	d	--	119	174	94.21
Total land operated 6/	9,421	4,758	1,980	24.95	142	2,024	90.52

d = insufficient data for disclosure.
 -- = not applicable or available.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ Number of farms.
 5/ Data may not add due to exclusion of rent-free acreage.
 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 7. FARMS AND LAND INFARMS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, ALL OTHER LIVESTOCK

Item	: Farm Cost and Returns Survey				: Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
			farm 1/	2/	farm 1/	2,3/	
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	3,553	--	--	35.99	--	--	--
Land and buildings owned	2,054	3,437	598	31.46	24	920*	52.41
Land rented or leased from others 5/	1,511	2,753	549	48.53	29	376	111.36
Cash rented	d	d	d	--	--	--	--
Share rented	288	564	512	45.14	--	--	--
Land rented or leased to others	d	d	d	--	--	--	--
Land used for pasture	1,486	3,460	429	38.42	29	457	48.22
Cropland in conservation tillage	d	d	d	--	--	--	--
Cropland removed from production	237	2,639	90	34.72	--	--	--
Long-term conservation	0	0	0	--	--	--	--
Other Government programs	237	2,639	90	34.72	--	--	--
Summer fallow	d	d	d	--	23	133	184.11
Total land operated 6/	3,503	3,553	986	35.99	29	1,137	42.78

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Number of farms.
- 5/ Data may not add due to exclusion of rent-free acreage.
- 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 8. FARMS AND LAND IN FARMS BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986

Item	: FARM COST AND RETURNS SURVEY7/							
	: Partnership				: Individual operation			
	Total	Farms reporting	Average per reporting	C.V.	Total	Farms reporting	Average per reporting	C.V.
		farm 1/	2/			farm 1/	2/	
	1,000 acres	Number	Acres	Percent	1,000 acres	Number	Acres	Percent
Farms 4/	2,592	--	--	24.42	21,666	--	--	8.94
Land and buildings owned	2,958	1,935	1,529	35.32	13,088	18,882	693	8.94
Land rented or leased from others 5/	2,227	1,782	1,250	28.27	14,569	16,629	876	15.36
Cash rented	1,433	1,554	923	34.54	9,465	12,406	763	22.59
Share rented	793	1,107	717	33.98	5,079	8,654	587	12.12
Land rented or leased to others	d	d	d	--	1,200	2,854	420	23.43
Land used for pasture	1,581	1,454	1,087	39.13	7,182	16,197	443	16.53
Cropland in conservation tillage	205	393	521	41.14	1,820	5,212	349	15.01
Cropland removed from production	794	2,086	381	32.75	4,211	19,632	214	23.23
Long-term conservation	0	0	0	--	92	512	180	39.04
Other Government programs	794	2,086	381	32.75	4,119	19,529	211	23.71
Summer fallow	514	1,665	309	27.84	2,656	14,876	179	23.12
Total land operated 6/	5,060	2,592	1,952	24.42	26,503	21,666	1,223	10.15

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Number of farms.
- 5/ Data may not add due to exclusion of rent-free acreage.
- 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.
- 7/ Data from Farm Business Management membership not available.

APPENDIX TABLE 9. FARMS AND LAND IN FARMS BY ACRES OPERATED, NORTH DAKOTA, 1986, 500 ACRES OR LESS

APPENDIX TABLE 10. FARMS AND LAND IN FARMS BY ACRES OPERATED, NORTH DAKOTA, 1986, 501 TO 1,000 ACRES

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm	C.V.	Farms reporting	Average per reporting farm	C.V.
		Number	Acres	Percent	Number	Acres	Percent
Farms 4/	5,157	--	--	33.44	--	--	
Land and buildings owned	1,619	3,682	440	35.24	13	248*	59.81
Land rented or leased from others 5/	617	2,020	306	41.79	--	--	
Cash rented	d	d	d	--	20	248	70.21
Share rented	260	1,319	197	49.56	--	--	
Land rented or leased to others	536	1,367	392	42.85	--	--	
Land used for pasture	d	d	d	--	8	164	83.26
Cropland in conservation tillage	d	d	d	--	--	--	
Cropland removed from production	330	4,190	79	48.35	--	--	
Long-term conservation	0	0	0	--	--	--	
Other Government programs	330	4,190	79	48.35	--	--	
Summer fallow	d	d	d	--	21	60	57.73
Total land operated 6/	1,701	5,157	330	33.44	25	327	36.85

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm	C.V.	Farms reporting	Average per reporting farm	C.V.
		Number	Acres	Percent	Number	Acres	Percent
Farms 4/	7,088	--	--	26.16	--	--	
Land and buildings owned	3,592	6,538	549	24.26	103	414*	64.75
Land rented or leased from others 5/	2,479	5,580	444	31.46	127	453	64.03
Cash rented	1,639	3,730	440	44.03	--	--	
Share rented	834	2,595	321	34.42	--	--	
Land rented or leased to others	d	d	d	--	--	--	
Land used for pasture	1,460	5,517	265	40.19	74	228	73.37
Cropland in conservation tillage	243	1,445	168	42.06	--	--	
Cropland removed from production	641	6,220	103	22.74	--	--	
Long-term conservation	d	d	d	--	--	--	
Other Government programs	638	6,169	103	22.84	--	--	
Summer fallow	406	4,454	91	30.09	118	125*	60.78
Total land operated 6/	5,794	7,088	818	26.16	131	764*	17.74

d = insufficient data for disclosure.
 -- = not applicable or available.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ Number of farms.
 5/ Data may not add due to exclusion of rent-free acreage.
 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

d = insufficient data for disclosure.
 -- = not applicable or available.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ Number of farms.
 5/ Data may not add due to exclusion of rent-free acreage.
 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 11. FARMS AND LAND IN FARMS BY ACRES OPERATED, NORTH DAKOTA, 1986, 1,000 ACRES OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	12,227	--	--	10.97	--	--	--
Land and buildings owned	10,972	10,736	1,022	10.97	295	907	86.00
Land rented or leased from others 5/	14,172	11,025	1,285	15.33	331	1,158	99.56
Cash rented	9,017	9,118	989	22.60	--	--	--
Share rented	5,139	5,959	862	12.15	--	--	--
Land rented or leased to others	528	1,353	390	25.84	--	--	--
Land used for pasture	7,123	9,751	731	16.76	233	972*	138.00
Cropland in conservation tillage	1,732	3,462	500	15.23	--	--	--
Cropland removed from production	4,082	11,522	354	24.50	--	--	--
Long-term conservation	89	461	194	40.19	--	--	--
Other Government programs	3,993	11,471	348	25.00	--	--	--
Summer fallow	2,563	8,606	298	24.09	317	275	77.72
Total land operated 6/	24,678	12,227	2,018	10.18	337	1,931	66.69

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Number of farms.
- 5/ Data may not add due to exclusion of rent-free acreage.
- 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 12. FARMS AND LAND IN FARMS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	4,802	--	--	30.73	--	--	--
Land and buildings owned	3,058	3,981	768	36.25	4	381*	94.92
Land rented or leased from others 5/	850	2,100	405	30.31	6	882	114.59
Cash rented	476	1,593	299	39.99	--	--	--
Share rented	374	1,370	273	28.02	--	--	--
Land rented or leased to others	d	d	d	--	--	--	--
Land used for pasture	1,179	2,759	427	46.51	5	343	98.18
Cropland in conservation tillage	175	401	437	41.97	--	--	--
Cropland removed from production	573	4,103	140	40.88	--	--	--
Long-term conservation	d	d	d	--	--	--	--
Other Government programs	569	4,103	139	41.13	--	--	--
Summer fallow	262	3,423	77	36.44	8	239	103.28
Total land operated 6/	3,810	4,802	752	30.73	6	1,136	78.50

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Number of farms.
- 5/ Data may not add due to exclusion of rent-free acreage.
- 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 13. FARMS AND LAND IN FARMS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.40

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	9,923	--	--	11.92	--	--	--
Land and buildings owned	7,525	9,122	825	11.43	230	611*	95.00
Land rented or leased from others 5/	7,051	8,198	860	15.08	298	1,089*	100.68
Cash rented	4,525	6,709	674	20.97	--	--	--
Share rented	2,523	3,822	680	15.75	--	--	--
Land rented or leased to others	702	1,265	555	30.65	--	--	--
Land used for pasture	3,750	7,423	505	19.48	174	738	174.33
Cropland in conservation tillage	965	1,913	504	18.41	--	--	--
Cropland removed from production	1,738	9,157	190	12.57	--	--	--
Long-term conservation	66	284	232	49.63	--	--	--
Other Government programs	1,672	9,105	184	12.59	--	--	--
Summer fallow	1,227	7,283	168	14.28	284	237*	75.60
Total land operated 6/	13,905	9,923	1,401	11.92	302	1,540	81.35

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Number of farms.
- 5/ Data may not add due to exclusion of rent-free acreage.
- 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 14. FARMS AND LAND IN FARMS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	6,490	--	--	20.41	--	--	--
Land and buildings owned	3,174	4,986	637	20.41	125	968*	88.45
Land rented or leased from others 5/	6,455	5,992	1,077	31.04	127	735*	107.03
Cash rented	3,940	3,744	1,052	48.54	--	--	--
Share rented	2,493	3,637	685	22.35	--	--	--
Land rented or leased to others	d	d	d	--	--	--	--
Land used for pasture	2,360	5,464	430	37.51	97	878*	128.02
Cropland in conservation tillage	614	2,586	238	30.63	--	--	--
Cropland removed from production	2,133	6,230	342	44.93	--	--	--
Long-term conservation	d	d	d	--	--	--	--
Other Government programs	2,127	6,230	341	45.07	--	--	--
Summer fallow	1,418	4,632	306	41.85	121	215*	87.53
Total land operated 6/	9,514	6,490	1,466	22.64	133	1,612	71.68

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Number of farms.
- 5/ Data may not add due to exclusion of rent-free acreage.
- 6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 15. FARMS AND LAND IN FARMS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986,
0.71 OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 acres	Number	Acres	Percent	Number	Acres	Percent
Farms 4/	3,103	--	--	18.06	--	--	--
Land and buildings owned	2,281	2,793	817	24.95	52	964	74.92
Land rented or leased from others 5/	2,656	2,221	1,196	19.88	47	486*	201.27
Cash rented	1,970	1,937	1,017	22.97	--	--	--
Share rented	685	927	739	28.49	--	--	--
Land rented or leased to others	195	428	456	38.96	--	--	--
Land used for pasture	1,571	2,124	740	32.23	39	753	142.09
Cropland in conservation tillage	241	663	363	46.18	--	--	--
Cropland removed from production	546	2,289	238	20.13	--	--	--
Long-term conservation	d	d	d	--	--	--	--
Other Government programs	531	2,238	237	20.42	--	--	--
Summer fallow	242	1,250	194	27.74	45	189	158.80
Total land operated 6/	4,747	3,103	1,530	18.06	52	1,403	84.84

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ Number of farms.

5/ Data may not add due to exclusion of rent-free acreage.

6/ Defined as owned land plus land rented or leased from others (including AUM land) less land rented out.

APPENDIX TABLE 16. FARM LABOR AND WAGES, ALL CLASSES, NORTH DAKOTA, 1986

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent
Labor hours	1,761,884	24,472	72	11.14	--	--	--
Operator	1,329,476	24,472	54	10.79	--	--	--
Unpaid	432,408	14,448	30	17.21	--	--	--
	1,000 dollars		Dollars		1,000 dollars		Dollars
Cash wages	61,545	12,803	4,807	13.71	456	8,529*	102.21
Operator and family	32,532	7,242	4,492	18.31	--	--	--
Employees	29,013	8,169	3,552	17.92	--	--	--
Contract labor	2,960	908	3,259	36.58	--	--	--
Fringe benefits (cash)	4,440	3,522	1,261	22.08	--	--	--

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 17. FARM LABOR AND WAGES BY ECONOMIC CLASS, NORTH DAKOTA, 1986,
LESS THAN \$40,000

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting:	Average per reporting:	C.V.	Farms reporting:	Average per reporting:	C.V.	
		farm 1/	farm 1/	2/	farm 1/	farm 1/	2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	292,066	5,741	51	30.26	--	--	--	
Operator	258,865	5,741	45	29.80	--	--	--	
Unpaid	d	d	d	--	--	--	--	
	1,000 dollars		Dollars		1,000 Dollars	Dollars		
Cash wages	d	d	d	--	52	3,522	127.81	
Operator and family	d	d	d	--	--	--	--	
Employees	d	d	d	--	--	--	--	
Contract labor	d	d	d	--	--	--	--	
Fringe benefits (cash)	0	0	0	--	--	--	--	

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 18. FARM LABOR AND WAGES BY ECONOMIC CLASS, NORTH DAKOTA, 1986,
\$40,000-\$249,999

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting:	Average per reporting:	C.V.	Farms reporting:	Average per reporting:	C.V.	
		farm 1/	farm 1/	2/	farm 1/	farm 1/	2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	1,366,631	17,654	77	13.77	--	--	--	
Operator	1,006,403	17,654	57	13.24	--	--	--	
Unpaid	360,229	11,687	31	19.76	--	--	--	
	1,000 dollars		Dollars		1,000 dollars	Dollars		
Cash wages	36,848	10,867	3,391	13.14	374	8,003*	87.85	
Operator and family	20,731	6,188	3,350	15.83	--	--	--	
Employees	16,117	6,724	2,397	18.41	--	--	--	
Contract labor	1,818	675	2,692	44.42	--	--	--	
Fringe benefits (cash)	1,942	2,748	707	29.12	--	--	--	

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 19. FARM LABOR AND WAGES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$250,000 AND MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.	
		reporting	reporting			reporting		reporting
		farm 1/	2/		farm 1/	2,3/		
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	103,186	1,076	96	22.57	--	--	--	
Operator	64,208	1,076	60	22.69	--	--	--	
Unpaid	38,978	739	53	34.03	--	--	--	
	1,000 dollars		Dollars		1,000 dollars	Dollars		
Cash wages	23,791	893	26,652	30.35	30	23,744	64.10	
Operator and family	11,161	584	19,113	45.29	--	--	--	
Employees	12,630	635	19,899	35.18	--	--	--	
Contract labor	d	d	d	--	--	--	--	
Fringe benefits (cash)	2,498	774	3,227	32.87	--	--	--	

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 20. FARM LABOR AND WAGES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, CASH GRAIN

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.	
		reporting	reporting			reporting		reporting
		farm 1/	2/		farm 1/	2,3/		
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	984,064	15,745	63	9.88	--	--	--	
Operator	792,511	15,745	50	10.21	--	--	--	
Unpaid	191,553	7,737	25	14.52	--	--	--	
	1,000 dollars		Dollars		1,000 dollars	Dollars		
Cash wages	41,038	8,103	5,064	15.38	297	10,221*	92.42	
Operator and family	23,922	4,533	5,277	17.03	--	--	--	
Employees	17,116	5,628	3,041	21.93	--	--	--	
Contract labor	1,852	685	2,705	42.91	--	--	--	
Fringe benefits (cash)	2,910	2,245	1,296	29.97	--	--	--	

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 21. FARM LABOR AND WAGES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, BEEF, HOG, OR SHEEP

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm	C.V.	Farms reporting	Average per reporting farm	C.V.	
			1/	2/		1/	2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	388,221	4,758	82	28.34	--	--	--	
Operator	269,226	4,758	57	26.96	--	--	--	
Unpaid	118,994	3,455	34	36.93	--	--	--	
	1,000 dollars		Dollars		1,000 dollars	Dollars		
Cash wages	13,001	2,118	6,137	38.46	118	4,811*	100.42	
Operator and family	d	d	d	--	--	--	--	
Employees	7,415	1,789	4,146	35.53	--	--	--	
Contract labor	d	d	d	--	--	--	--	
Fringe benefits (cash)	1,121	814	1,378	33.90	--	--	--	

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 22. FARM LABOR AND WAGES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, ALL OTHER LIVESTOCK

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm	C.V.	Farms reporting	Average per reporting farm	C.V.	
			1/	2/		1/	2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	363,168	3,553	102	40.50	--	--	--	
Operator	242,798	3,553	68	43.58	--	--	--	
Unpaid	120,371	3,218	37	45.27	--	--	--	
	1,000 dollars		Dollars		1,000 dollars	Dollars		
Cash wages	4,993	2,544	1,962	35.56	24	3,828*	101.72	
Operator and family	3,025	2,146	1,409	44.61	--	--	--	
Employees	1,968	715	2,753	43.19	--	--	--	
Contract labor	d	d	d	--	--	--	--	
Fringe benefits (cash)	142	426	332	47.38	--	--	--	

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 23. FARM LABOR AND WAGES BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986

FARM COST AND RETURNS SURVEY4/								
Item	Partnership				Individual operation			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/
	Hours per week	Number	Hours per week	Percent	Hours per week	Number	Hours per week	Percent
Labor hours	171,738	2,592	66	25.80	1,575,883	21,666	73	12.33
Operator	142,724	2,592	55	28.64	1,175,004	21,666	54	11.93
Unpaid	29,014	978	30	36.48	400,879	13,381	30	18.46
	1,000 dollars		Dollars		1,000 dollars		Dollars	
Cash wages	13,233	909	14,561	43.15	40,275	11,731	3,433	11.90
Operator and family	d	d	d	--	23,139	6,759	3,423	15.37
Employees	6,908	612	11,286	47.43	17,136	7,394	2,318	17.34
Contract labor	d	d	d	--	2,941	871	3,377	36.81
Fringe benefits (cash)	1,432	530	2,702	44.81	2,034	2,829	719	26.35

d = insufficient data for disclosure.
 -- = not applicable or available.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ Data from Farm Business Management Membership not available.

APPENDIX TABLE 24. FARM LABOR AND WAGES BY ACRES OPERATED, NORTH DAKOTA, 1986, 250 ACRES OR LESS

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	261,568	5,157	51	33.56	--	--	--	
Operator	233,802	5,157	45	32.77	--	--	--	
Unpaid	d	d	d	--	--	--	--	
	1,000 dollars		Dollars		1,000 dollars		Dollars	
Cash wages	635	618	1,028	39.96	20	5,078*	121.64	
Operator and family	d	d	d	--	--	--	--	
Employees	d	d	d	--	--	--	--	
Contract labor	d	d	d	--	--	--	--	
Fringe benefits (cash)	d	d	d	--	--	--	--	

d = insufficient data for disclosure.
 -- = not applicable or available.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 25. FARM LABOR AND WAGES BY ACRES OPERATED, NORTH DAKOTA, 1986,
501-1,000 ACRES

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
		farm 1/	farm 1/	2/	farm 1/	2,3/	2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor Hours	579,133	7,088	82	29.66	--	--	--	
Operator	397,014	7,088	56	29.45	--	--	--	
Unpaid	182,118	5,035	36	37.54	--	--	--	
	1,000 dollars		Dollars		1,000 dollars	Dollars		
Cash wages	5,311	4,828	1,100	26.32	120	5,826*	78.61	
Operator and family	2,903	2,394	1,213	34.45	--	--	--	
Employees	2,408	2,867	840	35.09	--	--	--	
Contract labor	d	d	d	--	--	--	--	
Fringe benefits (cash)	150	377	399	45.18	--	--	--	

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 26. FARM LABOR AND WAGES BY ACRES OPERATED, NORTH DAKOTA, 1986,
1,000 ACRES OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
		farm 1/	farm 1/	2/	farm 1/	2,3/	2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	921,183	12,227	75	9.76	--	--	--	
Operator	698,660	12,227	57	9.84	--	--	--	
Unpaid	222,523	7,646	29	13.07	--	--	--	
	1,000 dollars		Dollars		1,000 dollars	Dollars		
Cash wages	55,599	7,357	7,557	15.06	316	9,775*	99.44	
Operator and family	29,285	4,420	6,626	20.15	--	--	--	
Employees	26,314	4,787	5,497	19.55	--	--	--	
Contract labor	2,258	550	4,106	41.40	--	--	--	
Fringe benefits (cash)	4,279	3,058	1,399	22.87	--	--	--	

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 27. FARM LABOR AND WAGES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	266,117	4,802	55	27.30	--	--	--	
Operator	230,679	4,802	48	29.54	--	--	--	
Unpaid	35,438	965	37	46.67	--	--	--	
	1,000 dollars		Dollars		1,000 dollars		Dollars	
Cash wages	2,280	821	2,777	48.15	6	7,026	116.54	
Operator and family	d	d	d	--	--	--	--	
Employees	d	d	d	--	--	--	--	
Contract labor	d	d	d	--	--	--	--	
Fringe benefits (cash)	d	d	d	--	--	--	--	

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 28. FARM LABOR AND WAGES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.40

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	721,602	9,923	73	17.88	--	--	--	
Operator	551,023	9,923	56	19.35	--	--	--	
Unpaid	170,579	6,622	26	17.07	--	--	--	
	1,000 dollars		Dollars		1,000 dollars		Dollars	
Cash wages	30,348	6,934	4,377	20.04	289	9,614*	98.49	
Operator and family	16,848	4,376	3,850	28.83	--	--	--	
Employees	13,500	3,900	3,462	22.63	--	--	--	
Contract labor	d	d	d	--	--	--	--	
Fringe benefits (cash)	1,811	1,841	984	32.02	--	--	--	

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 29. FARM LABOR AND WAGES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	497,773	6,490	77	22.42	--	--	--	
Operator	350,459	6,490	54	20.44	--	--	--	
Unpaid	147,314	4,857	30	30.58	--	--	--	
	1,000 dollars		Dollars		1,000 dollars		Dollars	
Cash wages	19,245	3,411	5,642	27.07	115	7,467*	100.22	
Operator and family	10,351	1,849	5,598	30.12	--	--	--	
Employees	8,894	2,391	3,720	36.95	--	--	--	
Contract labor	d	d	d	--	--	--	--	
Fringe benefits (cash)	1,342	931	1,441	41.84	--	--	--	

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 30. FARM LABOR AND WAGES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.71 OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/	
	Hours per week	Number	Hours per week	Percent	Number	Hours per week	Percent	
Labor hours	269,720	3,103	87	34.51	--	--	--	
Operator	191,388	3,103	62	24.06	--	--	--	
Unpaid	d	d	d	--	--	--	--	
	1,000 dollars		Dollars		1,000 dollars		Dollars	
Cash wages	8,867	1,562	5,676	37.15	46	4,567	94.26	
Operator and family	d	d	d	--	--	--	--	
Employees	d	d	d	--	--	--	--	
Contract labor	d	d	d	--	--	--	--	
Fringe benefits (cash)	d	d	d	--	--	--	--	

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 31. CAPITAL INVESTMENTS AND IMPROVEMENTS, ALL CLASSES, NORTH DAKOTA, 1986

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 dollars	Number	dollars	Percent	Number	dollars	Percent
New investment:							
Machinery, autos, and trucks	167,504	13,721	12,208	19.47	747	10,485	137.17
Autos and trucks	39,577	7,706	5,136	21.84	--	--	--
Tractors	41,116	4,552	9,033	23.00	--	--	--
Other farm machinery	86,812	10,357	8,382	20.92	--	--	--
Other capital equipment	7,304	4,608	1,585	25.10	74	3,209	201.50
Construction and improvements	d	d	d	--	101	7,653	138.00
Building construction	d	d	d	--	--	--	--
Other farm construction and improvements	4,491	2,293	1,959	39.67	--	--	--
Total new capital investment	235,527	16,296	14,453	21.48	376	12,364*	123.87
Maintenance and repair:							
Motor vehicles, farm machinery, and equipment	144,616	23,618	6,123	10.93	495	9,559*	65.02
Farm building and other farm maintenance and repair	15,486	13,429	1,153	27.76	311	1,159	137.26
Total maintenance and repair	160,102	23,698	6,756	12.08	496	10,266*	65.36

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 32. CAPITAL INVESTMENTS AND IMPROVEMENTS BY ECONOMIC CLASS, NORTH DAKOTA, 1986, LESS THAN \$40,000

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
New investment:							
Machinery, autos, trucks	7,953	1,765	4,506	40.21	40	5,284	106.74
Autos and trucks	1,886	718	2,629	44.21	--	--	--
Tractors	d	d	d	--	--	--	--
Other farm machinery	d	d	d	--	--	--	--
Other capital equipment	d	d	d	--	10	1,884	118.54
Construction and improvements	d	d	d	--	--	--	--
Building construction	d	d	d	--	--	--	--
Other farm construction and improvements	d	d	d	--	--	--	--
Total new capital investment	8,820	2,336	3,776	37.58	45	6,419*	107.83
Maintenance and repair:							
Motor vehicles, farm machinery, and equipment	8,663	5,097	1,700	24.82	70	5,135*	70.58
Buildings and other farm maintenance and repair	1,181	2,442	483	46.92	43	784	122.74
Total maintenance and repair	9,844	5,097	1,931	23.93	70	5,617*	68.86

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 33. CAPITAL INVESTMENTS AND IMPROVEMENTS BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$40,000-\$249,999

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.	
		reporting	farm 1/		reporting	farm 1/		
		Number	Dollars	Percent	Number	Dollars	Percent	
New investment:								
Machinery, autos, trucks	142,183	11,231	12,660	22.62	281	10,298	135.41*	
Autos and trucks	34,432	6,684	5,152	24.74	--	--	--	
Tractors	39,776	4,252	9,355	23.74	--	--	--	
Other farm machinery	67,975	8,375	8,116	25.62	--	--	--	
Other capital equipment	5,234	3,646	1,436	23.96	55	2,149	97.53	
Construction and improvements	d	d	d	--	--	--	--	
Building construction	d	d	d	--	--	--	--	
Other farm construction and improvements	3,359	1,991	1,687	47.87	--	--	--	
Total new capital investment	201,094	13,168	15,271	24.93	303	12,127*	122.31	
Maintenance and repair:								
Motor vehicles, farm machinery, and equipment	115,631	17,445	6,628	13.23	394	9,754*	59.23	
Buildings and other farm maintenance and repair	11,661	10,439	1,117	34.89	248	1,154	139.77	
Total maintenance and repair	127,292	17,524	7,264	14.68	395	10,454*	59.44	

d = insufficient data for disclosure.
 -- = not applicable or available.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 34. CAPITAL INVESTMENTS AND IMPROVEMENTS BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$250,000 AND OVER

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.	
		reporting	farm 1/		reporting	farm 1/		
		Number	Dollars	Percent	Number	Dollars	Percent	
New investment:								
Machinery, autos, trucks	17,369	725	23,962	32.42	26	20,511	107.61	
Autos and trucks	3,258	304	10,703	43.92	--	--	--	
Tractors	d	d	d	--	--	--	--	
Other farm machinery	13,554	688	19,712	35.44	--	--	--	
Other capital equipment	d	d	d	--	9	11,165	145.87	
Construction and improvements	6,246	473	13,195	39.24	6	8,576	119.16	
Building construction	5,863	364	16,100	41.70	--	--	--	
Other farm construction and improvements	d	d	d	--	--	--	--	
Total new capital investment	25,612	792	32,340	29.16	28	24,473	91.98	
Maintenance and repair:								
Motor vehicles, farm machinery, and equipment	20,322	1,076	18,882	25.49	31	17,058	47.05	
Buildings and other farm maintenance and repair	d	d	d	--	20	2,021	102.59	
Total maintenance and repair	22,966	1,076	21,339	26.90	31	18,362	49.51	

d = insufficient data for disclosure.
 -- = not applicable or available.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 35. CAPITAL INVESTMENTS AND IMPROVEMENTS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986,
CASH GRAIN

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.	
		reporting:	reporting:		reporting:	reporting:		
		farm 1/	2/		farm 1/	2,3/		
	1,000							
	dollars	Number	Dollars	Percent	Number	Dollars	Percent	
New investment:								
Machinery, autos, trucks	110,430	8,748	12,623	11.16	216	12,294	132.21	
Autos and trucks	25,867	4,253	6,081	15.84	--	--	--	
Tractors	25,523	1,989	12,831	22.80	--	--	--	
Other farm machinery	59,040	6,941	8,506	13.71	--	--	--	
Other capital equipment	3,119	3,256	958	19.31	31	3,526	227.59	
Construction and improvements	d	d	d	--	64	8,730	127.40	
Building construction	d	d	d	--	--	--	--	
Other farm construction and improvements	2,122	559	3,795	49.78	--	--	--	
Total new capital investment	166,314	10,003	16,626	24.20	233	14,264	118.52	
Maintenance and repair:								
Motor vehicles, farm machinery, and equipment	94,350	14,984	6,297	9.94	305	9,733*	65.03	
Building and other farm maintenance and repair	6,010	6,416	937	18.50	174	1,154	140.54	
Total maintenance and repair	100,360	15,064	6,662	9.74	305	10,392*	65.38	

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 36. CAPITAL INVESTMENTS AND IMPROVEMENTS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986,
BEEF, HOG, OR SHEEP

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.	
		reporting:	reporting:		reporting:	reporting:		
		farm 1/	2/		farm 1/	2,3/		
	1,000							
	dollars	Number	Dollars	Percent	Number	Dollars	Percent	
New investment:								
Machinery, autos, trucks	17,980	2,606	6,899	38.04	95	6,455	96.77	
Autos and trucks	4,296	1,539	2,791	32.93	--	--	--	
Tractors	5,097	684	7,451	74.28	--	--	--	
Other farm machinery	8,586	1,313	6,540	46.52	--	--	--	
Other capital equipment	d	d	d	--	31	3,039	193.93	
Construction and improvements	6,010	2,079	2,891	39.61	28	6,164	170.98	
Building construction	d	d	d	--	--	--	--	
Other farm construction and improvements	d	d	d	--	--	--	--	
Total new capital investment	26,276	3,747	7,012	31.89	106	8,302	116.86	
Maintenance and repair:								
Motor vehicles, farm machinery, and equipment	27,456	4,665	5,886	24.98	142	8,582*	63.74	
Building and other farm maintenance and repair	3,418	3,588	953	39.83	98	1,100	131.82	
Total maintenance and repair	30,874	4,665	6,619	25.75	143	9,276*	64.31	

d = insufficient data for disclosure.

-- = not applicable or available.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 37. CAPITAL INVESTMENTS AND IMPROVEMENTS BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986.
ALL OTHER LIVESTOCK

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
New investment:							
Machinery, autos, trucks	d	d	d	--	23	7,935	202.16
Autos and trucks	d	d	d	--	--	--	--
Tractors	d	d	d	--	--	--	--
Other farm machinery	d	d	d	--	--	--	--
Other capital equipment	d	d	d	--	8	2,410	61.67
Construction and improvements	d	d	d	--	6	3,213	39.78
Building construction	d	d	d	--	--	--	--
Other farm construction and improvements	d	d	d	--	--	--	--
Total new capital investment	d	d	d	--	23	9,611	174.94
Maintenance and repair:							
Motor vehicles, farm machinery, and equipment	d	d	d	--	29	9,015	64.75
Building and other farm maintenance and repair	d	d	d	--	25	988	150.97
Total maintenance and repair	d	d	d	--	29	9,866	68.23

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 38. CAPITAL INVESTMENTS AND IMPROVEMENTS BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986

Item	Partnership				Individual Operation			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Total	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 dollars	Number	Dollars	Percent	1,000 dollars	Number	Dollars	Percent
New investment:								
Machinery, autos, trucks	17,428	1,483	11,750	34.92	148,711	12,112	12,278	21.63
Autos and trucks	4,888	521	9,389	43.04	34,518	7,148	4,829	24.40
Tractors	d	d	d	--	36,399	3,886	9,366	24.00
Other farm machinery	8,102	1,157	7,002	37.27	77,795	9,075	8,573	23.09
Other capital equipment	d	d	d	--	4,203	4,040	1,040	21.79
Construction and improvements	5,756	1,120	5,141	34.55	d	d	d	--
Building construction	d	d	d	--	d	d	d	--
Other farm construction and improvements	d	d	d	--	d	d	d	--
Total new capital investment	25,824	1,808	14,283	30.90	207,877	14,362	14,474	24.10
Maintenance and repair:								
Motor vehicles, farm machinery, and equipment	21,153	2,592	8,161	24.69	119,500	20,812	5,742	12.71
Building and other farm maintenance and repair	2,514	1,615	1,557	43.67	11,965	11,689	1,024	33.91
Total maintenance and repair	23,667	2,592	9,132	25.58	131,465	20,892	6,293	14.10

d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 39. CAPITAL INVESTMENTS AND IMPROVEMENTS BY ACRES OPERATED, NORTH DAKOTA, 1986,
500 ACRES OR LESS

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm	C.V.	Farms reporting	Average per reporting farm	C.V.
		1/	2/		1/	2,3/	
	1,000						
	dollars	Number	Dollars	Percent	Number	Dollars	Percent
New investment:							
Machinery, autos, trucks	7,127	1,553	4,589	40.00	18	6,160	127.84
Autos and trucks	1,757	522	3,367	44.81	--	--	--
Tractors	d	d	d	--	--	--	--
Other farm machinery	d	d	d	--	--	--	--
Other capital equipment	d	d	d	--	5	2,508	86.70
Construction and improvements	d	d	d	--	3	2,855	34.33
Building construction	d	d	d	--	--	--	--
Other farm construction and improvements	d	d	d	--	--	--	--
Total new capital investment	8,114	2,034	3,989	37.00	21	6,285	113.64
Maintenance and repair:							
Motor vehicles, farm machinery, and equipment	6,591	4,513	1,460	20.66	28	5,325*	107.60
Building and other farm maintenance and repair	d	d	d	--	13	1,027	122.94
Total maintenance and repair	7,520	4,513	1,666	21.73	28	5,802*	102.09

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 40. CAPITAL INVESTMENTS AND IMPROVEMENTS BY ACRES OPERATED, NORTH DAKOTA, 1986,
500-1,000 ACRES

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm	C.V.	Farms reporting	Average per reporting farm	C.V.
		1/	2/		1/	2,3/	
	1,000						
	dollars	Number	Dollars	Percent	Number	Dollars	Percent
New investment:							
Machinery, autos, trucks	d	d	d	--	97	8,328	134.89
Autos and trucks	d	d	d	--	--	--	--
Tractors	d	d	d	--	--	--	--
Other farm machinery	d	d	d	--	--	--	--
Other capital equipment	d	d	d	--	19	2,214	97.34
Construction and improvements	d	d	d	--	22	6,636	81.54
Building construction	d	d	d	--	--	--	--
Other farm construction and improvements	d	d	d	--	--	--	--
Total new capital investment	d	d	d	--	100	9,959	114.92
Maintenance and repair:							
Motor vehicles, farm machinery, and equipment	35,701	7,088	5,037	33.83	131	7,229*	67.48
Building and other farm maintenance and repair	d	d	d	--	66	920	163.07
Total maintenance and repair	42,774	7,088	6,035	37.28	131	7,693*	67.33

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 41. CAPITAL INVESTMENTS AND IMPROVEMENTS BY ACRES OPERATED, NORTH DAKOTA, 1986, 1,000 ACRES OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.	
		reporting	farm 1/		reporting	farm 1/		reporting
	1,000							
	dollars	Number	Dollars	Percent	Number	Dollars	Percent	
New investment:								
Machinery, autos, trucks	107,666	7,407	14,536	12.03	232	11,722	134.30*	
Autos and trucks	22,942	3,671	6,249	16.08	--	--	--	
Tractors	29,484	2,440	12,086	23.39	--	--	--	
Other farm machinery	55,240	5,861	9,425	14.32	--	--	--	
Other capital equipment	6,867	3,486	1,970	26.58	50	3,658	211.02	
Construction and improvements	19,375	3,656	5,300	29.32	76	8,137	144.91	
Building construction	15,637	1,568	9,970	34.89	--	--	--	
Other farm construction and improvements	3,738	2,139	1,748	44.05	--	--	--	
Total new capital investment	133,908	8,890	15,063	11.25	255	13,807	122.00	
Maintenance and repair:								
Motor vehicles, farm machinery, and equipment	102,325	12,017	8,515	10.05	336	10,819*	58.36	
Building and other farm maintenance and repair	7,483	6,600	1,134	20.62	232	1,234	132.06	
Total maintenance and repair	109,808	12,096	9,078	10.06	337	11,637*	58.91	

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 42. CAPITAL INVESTMENTS AND IMPROVEMENTS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.	
		reporting	farm 1/		reporting	farm 1/		reporting
	1,000							
	dollars	Number	Dollars	Percent	Number	Dollars	Percent	
New investment:								
Machinery, autos, trucks	22,065	1,976	11,169	33.58	6	11,468	116.11	
Autos and trucks	2,574	536	4,805	45.19	--	--	--	
Tractors	9,483	903	10,502	48.42	--	--	--	
Other farm machinery	10,007	1,654	6,050	39.79	--	--	--	
Other capital equipment	d	d	d	--	1	425	--	
Construction and improvements	d	d	d	--	2	13,259	112.53	
Building construction	d	d	d	--	--	--	--	
Other farm construction and improvements	d	d	d	--	--	--	--	
Total new capital investment	25,259	2,444	10,334	33.29	6	15,959	87.84	
Maintenance and repair:								
Motor vehicles, farm machinery, and equipment	11,547	4,172	2,768	28.11	6	8,261	110.89	
Building and other farm maintenance and repair	1,528	2,330	656	42.87	3	848	155.62	
Total maintenance and repair	13,075	4,251	3,076	28.12	6	8,684	104.60	

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 43. CAPITAL INVESTMENTS AND IMPROVEMENTS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.04

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
New investment:								
Machinery, autos, trucks	96,109	6,524	14,731	32.37	223	12,350	118.43	
Autos and trucks	27,016	4,429	6,100	31.08	--	--	--	
Tractors	22,591	2,865	7,886	34.58	--	--	--	
Other farm machinery	46,503	5,148	9,032	36.32	--	--	--	
Other capital equipment	5,041	2,386	2,113	35.01	47	2,790	236.39	
Construction and improvements	d	d	d	--	68	8,734	135.30	
Building construction	d	d	d	--	--	--	--	
Other farm construction and improvements	d	d	d	--	--	--	--	
Total new capital investment	147,065	7,457	19,723	33.47	242	14,377*	108.67	
Maintenance and repair:								
Motor vehicles, farm machinery, and equipment	68,305	9,830	6,949	18.19	305	9,856*	64.30	
Building and other farm maintenance and repair	8,142	5,799	1,404	48.65	191	1,217	143.54	
Total maintenance and repair	76,447	9,830	7,777	21.11	305	10,619*	64.59	

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 44. CAPITAL INVESTMENTS AND IMPROVEMENTS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
New investment:								
Machinery, autos, trucks	20,658	3,354	6,160	23.91	88	7,264	206.31	
Autos and trucks	5,406	1,919	2,816	29.03	--	--	--	
Tractors	2,882	384	7,511	49.02	--	--	--	
Other farm machinery	12,371	2,149	5,757	27.22	--	--	--	
Other capital equipment	1,263	809	1,561	34.00	22	4,395	155.91	
Construction and improvements	d	d	d	--	25	4,779	137.66	
Building construction	d	d	d	--	--	--	--	
Other farm construction and improvements	d	d	d	--	--	--	--	
Total new capital investment	31,137	4,491	6,933	24.29	96	8,910	176.77	
Maintenance and repair:								
Motor vehicles, farm machinery, and equipment	40,250	6,360	6,329	21.95	132	9,694*	67.18	
Building and other farm maintenance and repair	4,227	3,648	1,159	36.18	90	1,115	113.43	
Total maintenance and repair	44,477	6,360	8,993	21.57	133	10,376*	67.58	

d = insufficient data for disclosure.

-- = not applicable or available.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 45. CAPITAL INVESTMENTS AND IMPROVEMENTS BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.71 OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
New investment:							
Machinery, autos, trucks	26,512	1,713	15,473	25.62	30	5,868*	114.48
Autos and trucks	3,795	706	5,380	32.94	--	--	--
Tractors	6,160	400	15,384	42.08	--	--	--
Other farm machinery	16,557	1,332	12,433	30.10	--	--	--
Other capital equipment	564	578	976	46.85	4	2,312	99.52
Construction and improvements	d	d	d	--	6	5,511	102.79
Building construction	d	d	d	--	--	--	--
Other farm construction and improvements	d	d	d	--	--	--	--
Total new capital investment	29,422	1,751	16,806	24.95	32	6,824*	98.00
Maintenance and repair:							
Motor vehicles, farm machinery, and equipment	22,667	3,103	7,306	19.24	52	7,615	47.22
Building and other farm maintenance and repair	1,530	1,615	947	35.47	27	929	158.26
Total maintenance and repair	24,197	3,103	7,799	19.73	52	8,098	48.30

d = insufficient data for disclosure.
 -- = not applicable or available.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 46. FARM OPERATING EXPENSES, ALL CLASSES, NORTH DAKOTA, 1986

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Livestock and poultry purchases	111,589	10,599	10,528	24.62	246	45,578*	113.02
Cattle and calves	103,818	7,663	13,548	26.36	--	--	--
Hogs and pigs	4,606	1,972	2,336	47.25	--	--	--
Sheep and lambs	1,190	1,404	848	42.04	--	--	--
Other livestock and poultry	1,974	2,627	752	45.74	--	--	--
Livestock leased	d	d	d	--	--	--	--
Livestock and poultry services and supplies	15,493	13,720	1,129	17.71	330	2,227*	158.73
Feed	85,880	14,120	6,082	28.52	324	7,075	182.87
Seed and misc. supplies	109,391	23,195	4,716	9.43	491	10,120*	120.76
Fertilizer and lime	132,515	17,719	7,479	10.63	456	8,529*	102.21
Pesticides	74,777	21,578	3,465	10.80	459	4,655*	113.11
Fuels and oils	144,122	24,355	5,918	12.15	496	7,021*	55.04
Custom hired work	35,380	13,259	2,668	16.56	391	4,003*	131.21
Hired labor	33,453	8,692	3,849	17.62	389	4,957*	156.92
Interest	257,867	18,594	13,868	11.60	476	21,357*	83.95
Taxes	35,384	20,943	1,690	8.68	389	2,112*	86.85
General business	156,551	24,472	6,397	9.26	495	6,568	109.49
Cash rent	181,437	14,100	12,868	16.10	362	14,842*	4.88
Miscellaneous	160,102	23,698	6,756	12.08	496	10,266*	65.36
Total expenses	1,534,023	24,472	62,685	10.18	497	115,471*	70.99

d = insufficient data for disclosure.
 -- = not applicable or available.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ Data may not add due to rounding.

APPENDIX TABLE 47. FARM OPERATING EXPENSES BY ECONOMIC CLASS, NORTH DAKOTA, 1986,
LESS THAN \$40,000

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Livestock and poultry purchases	974	833	1,169	40.95	33	11,714*	70.75
Cattle and calves	607	561	1,084	42.01	--	--	--
Hogs and pigs	d	d	d	--	--	--	--
Sheep and lambs	0	0	0	--	--	--	--
Poultry and other livestock	d	d	d	--	--	--	--
Livestock leased	d	d	d	--	--	--	--
Livestock and poultry services and supplies	370	1,159	319	39.57	50	3,020*	101.16
Feed	1,820	1,671	1,089	43.22	46	5,512*	94.28
Seed and misc. supplies	6,506	4,739	1,373	25.21	68	3,594*	130.62
Fertilizer and lime	4,233	2,480	1,706	31.05	52	3,522*	127.81
Pesticides	2,227	4,277	521	32.46	59	1,585*	105.86
Fuels and oils	10,511	5,741	1,831	26.97	70	4,104*	61.86
Custom hired work	2,483	2,565	968	39.06	56	2,759*	89.88
Hired labor	d	d	d	--	44	1,802	114.86
Interest	4,478	1,753	2,554	27.79	66	15,095*	87.37
Taxes	3,365	4,254	791	25.45	52	1,213*	77.11
General business	11,990	5,741	2,088	28.31	70	3,956*	63.10
Cash rent	9,639	1,599	6,030	39.14	41	5,460*	8.50
Miscellaneous	9,844	5,097	1,931	23.93	70	5,617*	68.86
Total expenses	68,734	5,741	11,972	20.89	71	53,333*	55.43

-- = not applicable or available. d = insufficient data for disclosure.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 48. FARM OPERATING EXPENSES BY ECONOMIC CLASS, NORTH DAKOTA, 1986,
\$40,000-\$249,999

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Livestock and poultry purchases	84,592	9,198	9,197	27.91	196	43,259*	86.51
Cattle and calves	77,597	6,564	11,822	30.23	--	--	--
Hogs and pigs	d	d	d	--	--	--	--
Sheep and lambs	1,190	1,404	848	42.04	--	--	--
Poultry and other livestock	1,932	2,489	776	46.73	--	--	--
Livestock leased	d	d	d	--	--	--	--
Livestock and poultry services and supplies	12,755	11,993	1,064	19.53	262	2,094*	176.29
Feed	69,350	11,843	5,856	33.61	258	6,152	171.03
Seed and misc. supplies	85,185	17,417	4,891	11.18	393	9,989*	101.66
Fertilizer and lime	102,162	14,192	7,199	12.63	374	8,003	87.85
Pesticides	61,587	16,293	3,780	12.30	371	4,452*	97.68
Fuels and oils	117,446	17,538	6,697	14.78	395	7,110	47.10
Custom hired work	26,578	9,855	2,697	20.76	309	3,823*	121.43
Hired labor	18,058	7,078	2,551	18.51	315	4,627*	132.52
Interest	217,856	15,802	13,787	13.19	380	21,265*	82.20
Taxes	28,036	15,740	1,781	10.39	310	2,116*	75.29
General business	121,005	17,654	6,854	11.24	394	6,095*	64.19
Cash rent	137,629	11,541	11,925	20.33	324	14,000*	95.34
Miscellaneous	127,292	17,524	7,264	14.68	395	10,454*	59.44
Total expenses	1,209,583	17,654	68,514	12.39	395	112,497*	52.05

-- = not applicable or available. d = insufficient data for disclosure.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 49. FARM OPERATING EXPENSES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, 250,000 OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Livestock and poultry purchases	d	d	d	--	17	138,053	79.05	
Cattle and calves	d	d	d	--	--	--	--	
Hogs and pigs	d	d	d	--	--	--	--	
Sheep and lambs	0	0	0	--	--	--	--	
Poultry and other livestock	0	0	0	--	--	--	--	
Livestock leased	0	0	0	--	--	--	--	
Livestock and poultry services and supplies	d	d	d	--	18	1,964	95.94	
Feed	d	d	d	--	20	22,576	141.00	
Seed and misc. supplies	17,700	1,039	17,035	27.88	30	26,640	99.09	
Fertilizer and lime	26,121	1,046	24,963	26.10	30	23,775	64.10	
Pesticides	10,963	1,009	10,863	31.12	29	13,490	72.80	
Fuels and oils	16,166	1,076	15,020	23.56	31	12,481	46.76	
Custom hired work	6,320	840	7,526	32.83	26	8,820	125.91	
Hired labor	15,128	804	18,813	33.44	30	13,045	135.41	
Interest	35,533	1,039	34,198	28.07	30	36,287	65.33	
Taxes	3,982	949	4,197	29.52	27	3,801	97.61	
General business	23,557	1,076	21,887	25.80	31	18,485	117.41	
Cash rent	34,169	960	35,601	26.73	29	37,516	114.22	
Miscellaneous	22,966	1,076	21,339	26.90	31	18,362	49.51	
Total expenses	255,706	1,076	237,583	23.34	31	295,693	49.24	

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

TABLE 50. FARM OPERATING EXPENSES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, CASH GRAIN

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Livestock and poultry purchases	36,623	3,746	9,777	27.52	97	19,134*	83.18	
Cattle and calves	33,189	2,940	11,288	30.01	--	--	--	
Hogs and pigs	d	d	d	--	--	--	--	
Sheep and lambs	d	d	d	--	--	--	--	
Other livestock and poultry	d	d	d	--	--	--	--	
Livestock leased	d	d	d	--	--	--	--	
Livestock and poultry services and supplies	4,411	5,539	796	18.14	152	1,359*	189.26	
Feed	11,750	5,981	1,965	19.31	147	3,019	190.01	
Seed and misc. supplies	82,985	14,691	5,649	10.39	305	12,727*	110.36	
Fertilizer and lime	114,435	12,255	9,338	11.80	297	10,221	92.42	
Pesticides	58,685	14,107	4,160	10.24	296	5,683*	99.01	
Fuels and oils	87,586	15,628	5,604	8.60	305	7,265*	56.86	
Custom hired work	29,988	10,030	2,990	19.10	224	3,887*	126.22	
Hired labor	20,026	5,931	3,376	21.69	233	5,451*	161.37	
Interest	159,793	11,378	14,044	10.14	291	19,478*	87.91	
Taxes	23,674	13,723	1,725	9.01	237	2,085*	84.67	
General business	109,119	15,745	6,931	9.86	305	6,725	127.38	
Cash rent	119,413	8,444	14,142	12.74	239	17,378*	118.32	
Miscellaneous	100,360	15,064	6,662	9.74	305	10,391*	65.38	
Total expenses	958,894	15,745	60,902	8.77	306	101,303*	69.06	

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

TABLE 51. FARM OPERATING EXPENSES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, BEEF, HOG OR SHEEP

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
		Number	Dollars	Percent	Number	Dollars	Percent	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Livestock and poultry purchases	42,631	4,404	9,680	36.86	125	70,171*	86.93	
Cattle and calves	39,093	2,504	15,609	40.07	--	--	--	
Hogs and pigs	d	d	d	--	--	--	--	
Sheep and lambs	d	d	d	--	--	--	--	
Other livestock and poultry	d	d	d	--	--	--	--	
Livestock leased	0	0	0	--	--	--	--	
Livestock and poultry services and supplies	5,827	4,628	1,259	27.26	137	1,411	111.12	
Feed	d	d	d	--	135	8,470	178.92	
Seed and misc. supplies	14,210	4,665	3,046	29.47	139	5,278*	97.35	
Fertilizer and lime	11,225	3,558	3,155	32.63	118	4,811*	100.42	
Pesticides	10,146	3,942	2,574	46.73	118	2,406	108.72	
Fuels and oils	27,726	4,758	5,827	26.64	143	6,560*	48.71	
Custom hired work	4,070	2,328	1,748	31.47	128	3,151*	165.92	
Hired labor	8,536	2,009	4,249	34.50	116	3,113	123.44	
Interest	61,519	4,105	14,987	30.38	138	23,530*	75.22	
Taxes	8,316	3,745	2,221	27.66	115	2,210	94.89	
General business	26,379	4,758	5,544	28.01	142	5,783	71.87	
Cash rent	d	d	d	--	119	10,496	100.69	
Miscellaneous	30,874	4,665	6,619	25.75	143	9,276*	64.31	
Total expenses	338,659	4,758	71,179	25.79	143	141,916*	71.19	

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

TABLE 52. FARM OPERATING EXPENSES BY PRODUCTION SPECIALTY, NORTH DAKOTA, ALL OTHER LIVESTOCK

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
		Number	Dollars	Percent	Number	Dollars	Percent	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Livestock and poultry purchases	d	d	d	--	16	19,776	66.08	
Cattle and calves	d	d	d	--	--	--	--	
Hogs and pigs	d	d	d	--	--	--	--	
Sheep and lambs	0	0	0	--	--	--	--	
Other livestock and poultry	d	d	d	--	--	--	--	
Livestock leased	d	d	d	--	--	--	--	
Livestock and poultry services and supplies	5,255	3,553	1,479	40.77	29	9,102*	58.32	
Feed	33,769	3,553	9,503	40.94	29	19,629*	95.12	
Seed and misc. supplies	11,650	3,460	3,367	39.45	28	3,585	76.59	
Fertilizer and lime	d	d	d	--	24	3,828	101.72	
Pesticides	d	d	d	--	26	1,124	88.78	
Fuels and oils	d	d	d	--	29	5,932	52.87	
Custom hired work	1,322	901	1,468	39.87	29	7,786*	61.68	
Hired labor	2,110	715	2,951	43.30	21	6,335	126.16	
Interest	36,555	3,112	11,748	49.00	29	24,552*	49.73	
Taxes	3,311	3,437	963	27.27	24	2,132*	59.90	
General business	19,031	3,553	5,356	39.61	29	7,230*	40.97	
Cash rent	d	d	d	--	21	7,957	117.14	
Miscellaneous	d	d	d	--	29	9,866	68.32	
Total expenses	223,730	3,553	62,962	47.39	29	114,760*	51.55	

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 53. FARM OPERATING EXPENSES BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986

Item	Partnership				Individual operation			
	Total	Farms	Average per:	C.V.	Total	Farms	Average per:	C.V.
		reporting	reporting			reporting	reporting	
		farm 1/	2/			farm 1/	2/	
	1,000 dollars	Number	Dollars	Percent	1,000 dollars	Number	Dollars	Percent
Livestock and poultry purchases	d	d	d	--	98,134	9,560	10,265	27.04
Cattle and calves	d	d	d	--	90,613	6,623	13,681	29.16
Hogs and pigs	d	d	d	--	4,356	1,852	2,353	49.83
Sheep and lambs	0	0	0	--	1,190	1,404	848	42.04
Other livestock and poultry	0	0	0	--	1,974	2,627	752	45.74
Livestock leased	0	0	0	--	d	d	d	--
Livestock and poultry services and supplies	1,945	1,156	1,682	37.05	13,302	12,513	1,063	19.95
Feed	d	d	d	--	70,128	12,913	5,431	33.02
Seed and misc. supplies	16,103	2,419	6,656	27.52	90,384	20,599	4,388	10.54
Fertilizer and lime	20,875	2,141	9,751	29.93	107,065	15,415	6,946	12.09
Pesticides	11,846	2,246	5,185	29.77	80,948	19,116	3,188	12.23
Fuels and oils	19,698	2,592	7,600	23.72	122,132	21,549	5,668	14.11
Custom hired work	4,119	1,391	2,961	34.75	30,328	11,743	2,583	18.79
Hired labor	8,339	739	11,278	44.60	19,171	7,790	2,461	17.17
Interest	21,784	1,102	19,769	37.47	229,681	17,352	13,235	12.61
Taxes	6,868	1,935	3,549	32.41	28,162	18,831	1,496	8.20
General business	23,591	2,592	9,102	28.52	128,232	21,666	5,919	10.30
Cash rent	19,854	1,554	12,779	31.72	157,974	12,406	12,733	18.15
Miscellaneous	23,667	2,592	9,132	25.58	131,465	20,892	6,293	14.10
Total expenses	119,881	2,592	77,121	24.57	1,287,166	21,666	59,410	11.73

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

TABLE 54. FARM OPERATING EXPENSES BY ACRES OPERATED, NORTH DAKOTA, 1986, 500 ACRES OR LESS

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Total	Farms	Average per:	C.V.
		reporting	reporting			reporting	reporting	
		farm 1/	2/			farm 1/	2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Livestock and poultry purchases	d	d	d	--	12	23,334	154.19	
Cattle and calves	d	d	d	--	--	--	--	
Hogs and pigs	d	d	d	--	--	--	--	
Sheep and lambs	0	0	0	--	--	--	--	
Other livestock and poultry	d	d	d	--	--	--	--	
Livestock leased	0	0	0	--	--	--	--	
Livestock and poultry services and supplies	d	d	d	--	16	933	93.34	
Feed	d	d	d	--	15	12,974	171.43	
Seed and misc. supplies	4,639	4,234	1,095	27.90	26	4,672	160.71	
Fertilizer and lime	4,783	2,255	2,122	33.65	20	5,078	121.65	
Pesticides	2,091	3,865	541	34.05	21	2,235*	85.01	
Fuels and oils	9,631	5,078	1,897	30.56	28	3,793*	72.34	
Custom hired work	2,993	2,493	1,200	35.07	13	3,019	153.70	
Hired labor	301	515	585	47.87	18	2,307	151.03	
Interest	12,336	1,735	7,111	30.83	25	12,582	103.46	
Taxes	2,840	3,775	752	26.89	10	725	85.25	
General business	13,821	5,157	2,680	28.03	29	3,817	102.47	
Cash rent	4,998	1,252	3,992	34.28	13	8,579	98.08	
Miscellaneous	7,520	4,513	1,666	21.73	28	5,803*	102.90	
Total expenses	88,236	5,157	17,109	24.13	29	56,999*	97.90	

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

TABLE 55. FARM OPERATING EXPENSES BY ACRES OPERATED, NORTH DAKOTA, 1986, 500-1,000 ACRES

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm	C.V.	Farms reporting	Average per reporting farm	C.V.
		Number	Dollars	Percent	Number	Dollars	Percent
Livestock and poultry purchases	d	d	d	--	50	32,239	136.02
Cattle and calves	d	d	d	--	--	--	--
Hogs and pigs	d	d	d	--	--	--	--
Sheep and lambs	d	d	d	--	--	--	--
Other livestock and poultry	d	d	d	--	--	--	--
Livestock leased	d	d	d	--	--	--	--
Livestock and poultry services and supplies	4,718	4,809	981	46.01	77	2,816*	156.76
Feed	d	d	d	--	75	8,460	161.23
Seed and misc. supplies	4,294	6,823	3,561	26.20	128	8,496*	112.81
Fertilizer and lime	19,300	4,885	3,951	24.73	120	5,826*	78.61
Pesticides	16,945	6,473	2,618	34.33	121	3,277	109.33
Fuels and oils	40,073	7,051	5,683	38.41	131	5,112	51.57
Custom hired work	3,574	3,382	1,057	24.58	89	2,908*	121.22
Hired labor	2,559	2,867	892	34.90	99	2,999*	134.12
Interest	75,347	6,145	12,262	34.05	127	15,545*	87.54
Taxes	7,223	6,482	1,114	20.43	97	1,285	67.99
General business	33,122	7,088	4,673	28.15	130	5,230	75.61
Cash rent	33,182	3,730	8,896	32.63	100	12,093	103.93
Miscellaneous	42,774	7,088	6,035	37.28	131	7,693*	67.33
Total expenses	347,221	7,088	48,987	33.49	131	82,958*	70.93

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

TABLE 56. FARM OPERATING EXPENSES BY ACRES OPERATED, NORTH DAKOTA, 1986, 1,000 ACRES OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm	C.V.	Farms reporting	Average per reporting farm	C.V.
		Number	Dollars	Percent	Number	Dollars	Percent
Livestock and poultry purchases	72,974	6,338	11,514	23.62	184	50,653*	105.45
Cattle and calves	67,316	5,040	13,355	25.48	--	--	--
Hogs and pigs	d	d	d	--	--	--	--
Sheep and lambs	d	d	d	--	--	--	--
Other livestock and poultry	d	d	d	--	--	--	--
Livestock leased	d	d	d	--	--	--	--
Livestock and poultry services and supplies	9,983	7,972	1,252	16.82	237	2,124*	155.23
Feed	58,921	7,949	7,412	35.32	234	6,253	189.02
Seed and misc. supplies	80,458	12,138	6,629	9.50	337	11,159*	118.40
Fertilizer and lime	108,432	10,579	10,249	11.10	316	9,775	99.44
Pesticides	55,741	11,241	4,959	10.30	317	5,341	108.35
Fuels and oils	94,418	12,227	7,722	8.83	337	8,032	48.85
Custom hired work	28,813	7,384	3,902	19.38	289	4,384	129.23
Hired labor	30,593	5,310	5,761	19.10	272	5,845	150.47
Interest	170,184	10,714	15,884	9.84	324	24,312*	78.03
Taxes	25,321	10,685	2,370	10.71	282	2,446	81.33
General business	109,609	12,227	8,965	9.79	336	7,323*	111.80
Cash rent	143,258	9,118	15,712	18.39	281	16,111	123.69
Miscellaneous	109,808	12,096	9,078	10.06	337	11,637*	58.91
Total expenses	1,098,565	12,227	89,851	9.56	337	133,142*	64.17

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

TABLE 57. FARM OPERATING EXPENSES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
			farm 1/	2/	farm 1/	2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Livestock and poultry purchases	d	d	d	--	3	17,205	91.04
Cattle and calves	d	d	d	--	--	--	--
Hogs and pigs	46	330	138	49.67	--	--	--
Sheep and lambs	0	0	0	--	--	--	--
Other livestock and poultry	d	d	d	--	--	--	--
Livestock leased	d	d	d	--	--	--	--
Livestock and poultry services and supplies	2,193	1,700	1,290	41.80	4	2,449	74.08
Feed	3,230	1,700	1,900	36.67	4	5,328	67.64
Seed and misc. supplies	12,387	3,972	3,118	31.05	6	10,948	177.81
Fertilizer and lime	12,234	2,970	4,119	39.47	6	7,026	116.54
Pesticides	6,535	3,519	1,857	42.22	5	6,916	114.52
Fuels and oils	12,164	4,802	2,533	23.30	6	6,433	70.62
Custom hired work	2,958	2,992	989	36.97	4	2,023	76.39
Hired labor	d	d	d	--	4	6,645	180.16
Interest	d	d	d	--	0	0	0
Taxes	5,527	3,981	1,388	36.77	3	629*	33.06
General business	14,771	4,802	3,076	33.89	6	6,386	82.63
Cash rent	7,020	1,593	4,407	27.89	4	12,864	75.72
Miscellaneous	13,075	4,251	3,076	28.12	6	8,684	104.60
Total expenses	100,266	4,802	20,880	26.22	6	73,697	113.45

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

TABLE 58. FARM OPERATING EXPENSES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.40

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
			farm 1/	2/	farm 1/	2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Livestock and poultry purchases	57,151	4,428	12,905	42.28	143	40,897*	100.92
Cattle and calves	52,044	3,925	13,259	46.11	--	--	--
Hogs and pigs	d	d	d	--	--	--	--
Sheep and lambs	d	d	d	--	--	--	--
Other livestock and poultry	d	d	d	--	--	--	--
Livestock leased	0	0	0	--	--	--	--
Livestock and poultry services and supplies	6,892	5,697	1,210	30.28	192	1,732	174.74
Feed	42,861	5,693	7,529	35.92	188	5,162*	176.42
Seed and misc. supplies	44,452	9,700	4,583	14.65	302	11,743*	119.48
Fertilizer and lime	55,094	6,622	8,320	13.95	289	9,614	98.49
Pesticides	33,128	9,127	3,630	15.24	288	5,421*	108.33
Fuels and oils	69,880	9,923	7,042	21.89	305	7,218	58.32
Custom hired work	12,432	4,523	2,748	21.12	224	3,423	120.99
Hired labor	15,312	4,157	3,683	23.13	242	5,939*	152.14
Interest	78,118	8,647	9,034	23.21	290	13,667*	86.22
Taxes	17,719	9,122	1,942	11.28	226	2,098	91.00
General business	66,445	9,923	6,696	14.99	303	6,713	128.49
Cash rent	71,810	6,709	10,703	18.43	248	17,252*	119.55
Miscellaneous	76,447	9,830	7,777	21.11	305	10,619*	64.59
Total expenses	647,740	9,923	65,275	18.25	305	109,613*	69.71

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

TABLE 59. FARM OPERATING EXPENSES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		Number	Dollars	Percent	Number	Dollars	Percent
	1,000						
	dollars	Number	Dollars	Percent	Number	Dollars	Percent
Livestock and poultry purchases	24,065	3,475	6,926	37.01	75	56,473*	123.23
Cattle and calves	22,287	1,502	14,834	39.87	--	--	--
Hogs and pigs	983	1,142	861	45.56	--	--	--
Sheep and lambs	d	d	d	--	--	--	--
Other livestock and poultry	d	d	d	--	--	--	--
Livestock leased	d	d	d	--	--	--	--
Livestock and poultry services and supplies	4,136	4,320	958	34.57	94	3,064*	144.78
Feed	d	d	d	--	93	10,246	183.54
Seed and misc. supplies	30,891	6,267	4,929	19.15	133	7,449*	91.39
Fertilizer and lime	40,241	5,222	7,706	22.23	115	7,467	100.23
Pesticides	21,709	5,969	3,637	24.50	121	3,412	109.86
Fuels and oils	41,629	6,490	6,414	19.10	133	6,770	46.93
Custom hired work	14,317	4,071	3,517	33.92	121	4,525	136.26
Hired labor	10,236	2,503	4,090	36.90	102	3,690	132.03
Interest	103,043	6,416	16,061	19.68	134	30,718*	59.45
Taxes	6,386	4,855	1,315	17.54	119	2,186*	84.87
General business	42,090	6,490	6,485	18.13	134	6,387	65.82
Cash rent	63,873	3,744	17,059	38.60	107	11,281*	110.79
Miscellaneous	44,477	6,360	6,993	21.57	133	10,375*	67.58
Total expenses	479,595	6,490	73,895	19.36	134	129,718*	76.54

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

TABLE 60. FARM OPERATING EXPENSES BY DEBT/ASSET RATIO, NORTH DAKOTA, 0.71 OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		Number	Dollars	Percent	Number	Dollars	Percent
	1,000						
	dollars	Number	Dollars	Percent	Number	Dollars	Percent
Livestock and poultry purchases	23,925	1,284	18,628	42.25	25	43,070*	88.34
Cattle and calves	23,089	1,061	21,761	43.72	--	--	--
Hogs and pigs	d	d	d	--	--	--	--
Sheep and lambs	d	d	d	--	--	--	--
Other livestock and poultry	d	d	d	--	--	--	--
Livestock leased	d	d	d	--	--	--	--
Livestock and poultry services and supplies	2,272	2,003	1,134	33.43	40	2,618*	123.00
Feed	7,323	1,952	3,752	34.68	39	8,916*	118.23
Seed and misc. supplies	20,111	3,103	6,482	20.00	50	7,331	120.03
Fertilizer and lime	22,060	2,751	8,018	22.11	46	4,567*	94.26
Pesticides	11,865	2,810	4,222	23.91	45	2,839*	96.31
Fuels and oils	19,192	2,986	6,427	18.14	52	6,577	49.30
Custom hired work	4,486	1,556	2,883	24.83	42	5,778*	124.07
Hired labor	6,228	1,269	4,909	48.09	41	2,146*	113.43
Interest	74,571	3,103	24,035	19.63	52	40,118*	50.58
Taxes	5,472	2,830	1,933	22.92	41	2,088	64.47
General business	31,979	3,103	10,307	21.06	52	6,212*	53.90
Cash rent	36,180	1,937	18,679	19.12	35	8,885*	113.15
Miscellaneous	24,197	3,103	7,799	19.73	52	8,098	48.30
Total expenses	289,876	3,103	93,430	17.20	52	117,944*	48.00

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

APPENDIX TABLE 61. FARM AND NONFARM INCOME SOURCES, ALL CLASSES, NORTH DAKOTA 1986

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
			farm 1/	2/	farm 1/	2,3/		
	1,000							
	dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Crop and livestock sales 4/	1,392,106	23,902	58,243	13.57	494	84,574*	83.58	
Crop sales 4/	887,330	22,310	30,807	13.86	472	54,602*	104.16	
Cash grains	539,687	21,700	24,870	14.82	---	---	---	
Hay, forage, and seeds	7,734	2,225	3,476	44.67	---	---	---	
Other crops	139,910	9,476	14,764	15.68	---	---	---	
Livestock and poultry sales 4/	704,776	14,934	47,191	22.38	354	45,218	128.70	
Cattle and calves	379,192	13,025	29,113	14.29	325	40,113*	131.55	
Milk	d	d	d	---	86	7,870	81.81	
Hogs and pigs	d	d	d	---	80	33,493	141.08	
Sheep and lambs	d	d	d	---	45	10,104	183.49	
Other livestock or poultry	d	d	d	---	0	0	0	
Other farm income	545,598	23,233	23,484	8.22	493	24,567	88.96	
Government farm payments	489,636	22,484	20,867	8.92	453	23,397*	82.42	
Custom work, machine hire, and wages from other farms	21,317	7,660	2,783	14.93	10	23,610*	101.74	
Other farm-related income	54,645	9,046	6,041	13.97	467	2,734*	212.59	
Gross cash income from farming:	1,937,704	24,256	79,886	11.48	497	108,432*	75.05	
Nonfarm income	236,749	19,370	12,222	15.95	357	4,614*	279.28	
Nonfarm business	72,460	5,966	12,146	25.74	0	0	0	
Cash wages	89,948	7,691	11,696	20.30	186	3,705*	192.11	
Interest and dividends	58,247	13,387	4,351	24.11	225	3,537	410.77	
Other nonfarm income	16,094	3,715	4,332	32.97	133	1,219*	119.98	

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ Data may not add due to rounding.

APPENDIX TABLE 62. FARM AND NONFARM INCOME SOURCES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, LESS THAN \$40,000

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
			farm 1/	2/	farm 1/	2,4/		
	1,000							
	dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Crop and livestock sales 4/	62,803	5,572	11,272	23.81	68	18,018*	49.77	
Crop sales 4/	50,293	5,392	9,327	26.78	57	10,109	74.09	
Cash grains	44,558	5,299	8,409	28.66	---	---	---	
Hay, forage, and seeds	d	d	d	---	---	---	---	
Other crops	3,624	1,310	2,766	32.02	---	---	---	
Livestock and poultry sales 4/	12,510	2,150	5,819	28.29	48	13,520*	70.47	
Cattle and calves	7,016	1,581	4,439	29.54	44	10,767*	75.38	
Milk	d	d	d	---	29	4,017	82.42	
Hogs and pigs	d	d	d	---	5	3,777	107.05	
Sheep and lambs	0	0	0	---	6	6,636	81.37	
Other livestock or poultry	d	d	d	---	0	0	0	
Other farm income	33,850	5,042	6,714	27.44	70	7,890	75.99	
Government farm payments	28,733	4,949	5,806	31.02	61	7,789*	65.54	
Custom work, machine hire, and wages from other farms	2,644	1,152	2,296	43.80	0	0	0	
Other farm-related income	2,473	871	2,838	49.44	67	1,152*	144.48	
Gross cash income from farming:	96,653	5,651	17,104	24.29	71	25,035*	42.39	
Nonfarm income	71,936	4,945	14,547	43.62	43	2,945*	167.32	
Nonfarm business	d	d	d	---	0	0	0	
Cash wages	d	d	d	---	17	1,818	149.09	
Interest and dividends	19,642	3,695	5,316	48.46	24	2,661	217.82	
Other nonfarm income	3,070	747	4,111	41.49	21	1,519*	132.21	

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ Data may not add due to rounding.

APPENDIX TABLE 63. FARM AND NONFARM INCOME SOURCES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$40,000-\$249,999

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.	
		reporting	reporting		reporting	reporting		
		farm 1/	2/		farm 1/	2,4/		
	1,000							
	dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Crop and livestock sales 4/	1,144,516	17,333	66,031	16.37	395	80,370*	52.62	
Crop sales 4/	533,477	16,048	33,242	17.42	386	52,597*	80.00	
Cash grains	431,448	15,531	27,779	18.23	--	--	--	
Hay, forage, and seeds	d	d	d	--	--	--	--	
Other crops	96,568	7,414	13,025	17.36	--	--	--	
Livestock and poultry sales 4/	611,040	12,179	50,172	25.64	284	40,294*	89.53	
Cattle and calves	320,015	10,868	29,444	16.50	263	35,757*	94.00	
Milk	d	d	d	--	36	10,747	60.94	
Hogs and pigs	d	d	d	--	48	26,122	121.67	
Sheep and lambs	d	d	d	--	35	11,391	182.41	
Other livestock or poultry	d	d	d	--	0	0	0	
Other farm income	410,619	17,115	23,992	9.27	392	25,091	68.72	
Government farm payments	352,092	16,459	21,392	9.96	367	23,450*	60.55	
Custom work, machine hire, and wages from other farms	14,457	5,948	2,431	18.24	8	24,414	109.24	
Other farm-related income	44,070	7,438	5,925	16.22	370	2,795*	212.64	
Gross cash income from farming	1,555,136	17,529	88,719	14.04	395	105,270*	46.55	
Nonfarm income	156,318	13,476	11,600	15.39	268	4,838*	290.19	
Nonfarm business	47,325	4,249	11,137	26.97	0	0	0	
Cash wages	59,142	5,165	11,451	17.53	156	3,721*	198.41	
Interest and dividends	36,845	9,024	4,083	28.25	182	3,778	423.51	
Other nonfarm income	13,005	2,931	4,438	39.69	105	1,193*	114.65	

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ Data may not add due to rounding.

APPENDIX TABLE 64. FARM AND NONFARM INCOME SOURCES BY ECONOMIC CLASS, NORTH DAKOTA, 1986, \$250,000 OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.	
		reporting	reporting		reporting	reporting		
		farm 1/	2/		farm 1/	2,4/		
	1,000							
	dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Crop and livestock sales 4/	184,787	997	185,342	22.75	31	284,137*	29.46	
Crop sales 4/	103,561	870	119,017	27.35	29	168,741	65.90	
Cash grains	63,681	870	73,185	27.24	--	--	--	
Hay, forage, and seeds	d	d	d	--	--	--	--	
Other crops	39,717	752	52,833	38.17	--	--	--	
Livestock and poultry sales 4/	81,226	606	134,091	31.30	22	177,943	75.64	
Cattle and calves	52,161	576	90,578	31.13	18	175,494*	66.35	
Milk	d	d	d	--	d	d	d	
Hogs and pigs	d	d	d	--	7	105,270	78.63	
Sheep and lambs	0	0	0	--	4	4,042	64.43	
Other livestock or poultry	0	0	0	--	0	0	0	
Other farm income	101,129	1,076	93,962	27.03	31	55,601*	84.89	
Government farm payments	88,810	1,076	82,516	28.65	25	60,698*	69.81	
Custom work, machine hire, and wages from other farms	4,216	561	7,518	36.12	2	20,393	67.22	
Other farm-related income	8,103	737	10,995	35.59	30	5,512*	155.20	
Gross cash income from farming	285,916	1,076	265,652	22.55	31	339,738*	22.46	
Nonfarm income	8,495	949	8,948	47.03	26	4,892*	152.28	
Nonfarm business	d	d	d	--	0	0	0	
Cash wages	d	d	d	--	13	5,977	125.75	
Interest and dividends	1,760	668	2,633	35.10	19	2,335	108.88	
Other nonfarm income	d	d	d	--	7	733	112.77	

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ Data may not add due to rounding.

APPENDIX TABLE 65. FARM AND NONFARM INCOME SOURCES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986.
CASH GRAIN

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
		farm 1/	2/		farm 1/	2/		
	1,000							
	dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Crop and livestock sales 4/	735,064	15,302	48,037	13.12	306	79,107*	73.75	
Crop sales 4/	607,453	15,265	39,795	15.37	306	69,138*	81.24	
Cash grains	484,044	4,841	32,616	16.32	--	--	--	
Hay, forage, and seeds	d	d	d	--	--	--	--	
Other crops	d	d	d	--	--	--	--	
Livestock and poultry sales 4/	127,612	6,751	18,904	13.66	170	17,944	87.91	
Cattle and calves	109,347	5,846	18,705	14.84	154	17,141	89.61	
Milk	d	d	d	--	19	5,387	102.92	
Hogs and pigs	d	d	d	--	15	10,496	112.57	
Sheep and lambs	d	d	d	--	21	7,187	70.30	
Other livestock or poultry	d	d	d	--	0	0	0	
Other farm income	428,806	15,512	27,515	9.02	302	30,615	78.14	
Government farm payments	366,266	15,512	23,612	9.91	287	28,169*	74.66	
Custom work, machine hire, and wages from other farms	16,235	5,278	3,077	16.63	6	35,059*	70.74	
Other farm-related income	44,305	5,609	7,899	15.75	288	3,302*	204.34	
Gross cash income from farming:	1,161,870	15,656	74,211	11.01	306	109,323*	68.20	
Nonfarm income	176,914	13,491	13,114	15.29	216	5,866*	276.05	
Nonfarm business	50,017	3,886	13,569	32.12	0	0	0	
Cash wages	66,522	5,955	11,171	18.08	110	4,866*	181.84	
Interest and dividends	45,421	9,488	4,787	28.86	156	4,212	409.66	
Other nonfarm income	14,953	2,736	5,466	35.33	62	1,204*	115.55	

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 66. FARM AND NONFARM INCOME SOURCES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986.
BEEF, HOG OR SHEEP

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.	
		farm 1/	2/		farm 1/	2/		
	1,000							
	dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Crop and livestock sales 4/	348,030	4,631	75,160	25.33	143	100,477*	85.42	
Crop sales 4/	52,565	4,032	13,038	45.47	131	21,454*	110.77	
Cash grains	37,576	3,846	9,771	42.79	--	--	--	
Hay, forage, and seeds	d	d	d	--	--	--	--	
Other crops	d	d	d	--	--	--	--	
Livestock and poultry sales 4/	295,465	4,631	63,808	25.82	143	80,823*	94.10	
Cattle and calves	195,141	3,677	53,071	21.52	133	71,703*	96.55	
Milk	d	d	d	--	10	5,787	90.66	
Hogs and pigs	d	d	d	--	42	39,691	133.28	
Sheep and lambs	d	d	d	--	23	12,881	197.58	
Other livestock or poultry	d	d	d	--	0	0	0	
Other farm income	81,749	4,396	18,596	27.48	143	16,164	84.87	
Government farm payments	69,509	4,210	16,511	27.95	126	16,350	76.06	
Custom work, machine hire, and wages from other farms	4,187	1,572	2,664	38.52	4	6,437	110.34	
Other farm-related income	8,053	2,735	2,944	39.82	131	1,721*	197.31	
Gross cash income from farming:	429,779	4,631	92,815	25.40	143	116,640*	78.48	
Nonfarm income	38,371	4,186	9,167	31.90	111	2,989*	131.55	
Nonfarm business	22,219	2,250	9,876	43.08	0	0	0	
Cash wages	6,374	690	9,238	45.07	64	2,102*	120.16	
Interest and dividends	d	d	d	--	54	2,197	182.43	
Other nonfarm income	724	863	840	49.02	57	1,378*	114.56	

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 67. FARM AND NONFARM INCOME SOURCES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, ALL OTHER LIVESTOCK

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
			farm 1/	2/		farm 1/	2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Cash and livestock sales 4/	297,537	3,553	83,732	47.73	29	34,385*	70.26
Crop sales 4/	15,838	2,598	6,095	34.24	19	8,361	137.31
Cash grains	15,500	2,598	5,965	34.35	--	--	--
Hay, forage, and seeds	0	0	0	--	--	--	--
Other crops	d	d	d	--	--	--	--
Livestock and poultry sales 4/	281,699	3,553	79,275	49.19	29	28,907*	65.84
Cattle and calves	74,704	3,502	21,331	43.80	29	19,690	65.97
Milk	d	d	d	--	29	9,218	73.13
Hogs and pigs	0	0	0	--	0	0	0
Sheep and lambs	d	d	d	--	0	0	0
Other livestock or poultry	d	d	d	--	0	0	0
Other farm income	34,647	3,288	10,539	39.27	29	12,263	96.20
Government farm payments	31,485	2,725	11,554	42.70	28	10,351	77.69
Custom work, machine hire, and wages from other farms	d	d	d	--	0	0	0
Other farm-related income	2,268	664	3,413	38.67	29	2,269	224.55
Gross cash income from farming:	332,185	3,553	93,483	46.62	29	46,648*	71.12
Nonfarm income	6,716	1,278	5,256	32.71	18	1,199*	148.59
Nonfarm business	d	d	d	--	0	0	0
Cash wages	3,788	631	6,005	44.65	7	474*	87.92
Interest and dividends	2,288	929	2,463	45.58	8	1,927	131.17
Other nonfarm income	d	d	d	--	9	317	127.56

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 68. FARM AND NONFARM INCOME SOURCES BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986

Item	Farm Cost and Returns Survey							
	Partnership				Individual operation			
	Total	Farms reporting	Average per reporting	C.V.	Total	Farms reporting	Average per reporting	C.V.
		farm 1/	2/			farm 1/	2/	
	1,000 dollars	Number	Dollars	Percent	1,000 dollars	Number	Dollars	Percent
Crop and livestock sales 4/	158,807	2,385	66,582	23.71	1,194,245	21,302	56,062	15.62
Crop sales 4/	80,047	2,325	34,423	26.15	578,800	19,771	29,275	16.15
Cash grains	60,380	2,246	26,882	27.74	469,112	19,240	24,382	16.86
Hay, forage, and seeds	d	d	d	--	5,980	1,809	3,305	49.89
Other crops	17,913	1,158	15,470	45.89	103,708	8,155	12,716	16.48
Livestock and poultry sales 4/	78,760	1,154	68,234	35.33	615,445	13,729	44,828	25.31
Cattle and calves	48,133	1,117	43,091	41.47	320,488	11,857	27,030	15.67
Milk	d	d	d	--	d	d	d	--
Hogs and pigs	d	d	d	--	d	d	d	--
Sheep and lambs	0	0	0	--	d	d	d	--
Other livestock or poultry	0	0	0	--	d	d	d	--
Other farm income	69,346	2,086	33,244	28.05	462,962	20,933	22,117	9.02
Government farm payments	63,705	2,086	30,540	29.32	395,071	20,184	19,574	9.79
Custom work, machine hire, and wages from other farms	2,265	774	2,927	37.10	18,683	6,849	2,728	16.46
Other farm-related income	3,375	534	6,317	40.27	49,208	8,348	5,894	15.24
Gross cash income from farming:	228,152	2,464	92,579	23.75	1,657,207	21,577	76,804	13.17
Nonfarm income	37,846	2,394	15,806	43.90	198,347	16,850	11,771	14.39
Nonfarm business	d	d	d	--	67,814	5,394	12,572	27.31
Cash wages	d	d	d	--	67,591	6,690	10,104	16.42
Interest and dividends	9,980	1,769	5,643	45.51	48,062	11,544	4,163	27.55
Other nonfarm income	1,213	879	1,381	48.61	14,881	2,836	5,247	35.46

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 69. FARM AND NONFARM INCOME SOURCES BY ACRES OPERATED, NORTH DAKOTA, 1986. 500 ACRES OR LESS

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.
		reporting	reporting		reporting	reporting	
		farm 1/	2/		farm 1/	2,3/	
	1,000						
	dollars	Number	Dollars	Percent	Number	Dollars	Percent
Crop and livestock sales 4/	91,538	5,157	17,749	25.88	26	54,416	167.65
Crop sales 4/	54,852	4,971	11,034	29.64	23	25,078*	104.41
Cash grains	49,568	4,827	10,269	31.83	--	--	--
Hay, forage, and seeds	d	d	d	--	--	--	--
Other crops	2,873	1,124	2,555	31.84	--	--	--
Livestock and poultry sales 4/	36,686	1,833	20,009	39.58	17	49,296	228.79
Cattle and calves	22,787	1,264	18,024	46.51	10	33,061	245.62
Milk	d	d	d	--	3	973	84.65
Hogs and pigs	d	d	d	--	6	58,903	128.86
Sheep and lambs	0	0	0	--	5	30,215	180.05
Other livestock or poultry	d	d	d	--	0	0	0
Other farm income	28,540	4,448	6,416	31.40	29	9,662	180.12
Government farm payments	24,224	4,269	5,675	36.06	20	7,244	58.31
Custom work, machine hire, and wages from other farms	2,446	900	2,718	46.55	d	d	d
Other farm-related income	1,870	804	2,326	46.01	28	1,966	154.75
Gross cash income from farming:	120,078	5,157	23,283	24.93	29	58,450	156.55
Nonfarm income	65,048	4,501	14,452	47.36	19	1,848*	146.71
Nonfarm business	d	d	d	--	0	0	0
Cash wages	d	d	d	--	5	2,189	175.57
Interest and dividends	d	d	d	--	13	561	99.19
Other nonfarm income	2,440	550	4,438	49.66	5	3,375	94.18

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ data may not add due to rounding.

APPENDIX TABLE 70. FARM AND NONFARM INCOME SOURCES BY ACRES OPERATED, NORTH DAKOTA, 1986. 501-1,000 ACRES

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.
		reporting	reporting		reporting	reporting	
		farm 1/	2/		farm 1/	2,3/	
	1,000						
	dollars	Number	Dollars	Percent	Number	Dollars	Percent
Crop and livestock sales 4/	408,024	6,971	58,528	40.22	131	61,345	88.23
Crop sales 4/	168,659	6,136	27,485	43.64	122	43,602*	89.96
Cash grains	149,714	5,918	25,300	47.72	--	--	--
Hay, forage, and seeds	d	d	d	--	--	--	--
Other crops	17,664	2,391	7,388	45.54	--	--	--
Livestock and poultry sales 4/	d	d	d	--	85	31,963	142.05
Cattle and calves	d	d	d	--	74	22,268	167.79
Milk	d	d	d	--	22	7,352	75.28
Hogs and pigs	d	d	d	--	16	51,970	116.76
Sheep and lambs	d	d	d	--	9	8,417	82.57
Other livestock or poultry	d	d	d	--	0	0	0
Other farm income	116,801	6,878	16,982	23.06	129	15,776	76.44
Government farm payments	97,281	6,402	15,196	25.76	116	14,796	66.19
Custom work, machine hire, and wages from other farms	6,458	2,205	2,928	33.65	3	11,116	106.25
Other farm-related income	13,062	2,857	4,572	30.66	121	2,359*	205.12
Gross cash income from farming:	524,826	7,051	74,435	35.51	131	76,880	73.64
Nonfarm income	73,423	4,675	15,707	27.20	71	5,268*	424.59
Nonfarm business	33,064	2,084	15,862	34.42	0	0	0
Cash wages	28,694	1,484	19,336	37.20	36	1,833*	135.49
Interest and dividends	7,967	3,092	2,577	30.95	43	6,476	443.15
Other nonfarm income	3,697	601	6,156	43.68	26	1,138*	86.56

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ data may not add due to rounding.

APPENDIX TABLE 71. FARM AND NONFARM INCOME SOURCES BY ACRES OPERATED, NORTH DAKOTA, 1986, 1,000 ACRES OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		farm 1/	farm 1/	2/	farm 1/	2,3/	2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Crop and livestock sales 4/	892,543	11,773	75,814	10.10	337	95,930*	74.94
Crop sales 4/	463,820	11,203	41,402	8.71	327	60,783*	102.88
Cash grains	340,405	10,956	31,070	8.22	--	--	--
Hay, forage, and seeds	d	d	d	--	--	--	--
Other crops	119,373	5,961	20,025	17.24	--	--	--
Livestock and poultry sales 4/	428,724	8,143	52,650	17.96	252	49,414	114.20
Cattle and calves	295,871	7,880	37,546	14.62	241	45,885	118.44
Milk	55,621	1,072	51,898	27.86	41	8,330*	79.63
Hogs and pigs	d	d	d	--	38	21,702	137.79
Sheep and lambs	d	d	d	--	31	7,350	61.63
Other livestock or poultry	d	d	d	--	0	0	0
Other farm income	400,257	11,906	33,617	8.76	335	29,243*	80.30
Government farm payments	348,131	11,813	29,469	9.07	317	27,564	75.65
Custom work, machine hire, and wages from other farms	12,412	4,555	2,725	17.20	6	20,408*	74.96
Other farm-related income	39,713	5,385	7,375	16.89	318	2,944*	214.43
Gross cash income from farming	1,292,800	12,048	107,305	9.04	337	124,999*	66.74
Nonfarm income	98,278	10,195	9,640	15.40	267	4,637*	203.92
Nonfarm business	21,442	2,586	8,293	33.68	0	0	0
Cash wages	34,089	3,976	8,573	14.64	145	4,222*	186.43
Interest and dividends	32,790	6,976	4,700	31.40	169	3,019*	281.94
Other nonfarm income	9,957	2,564	3,883	49.44	102	1,135*	122.10

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 72. FARM AND NONFARM INCOME SOURCES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		farm 1/	farm 1/	2/	farm 1/	2,3/	2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Crop and livestock sales 4/	109,744	4,660	23,548	25.26	6	68,850	124.35
Crop sales 4/	60,502	4,481	13,502	24.23	6	50,576	151.40
Cash grains	51,662	4,481	11,529	25.23	--	--	--
Hay, forage, and seeds	d	d	d	--	--	--	--
Other crops	6,974	1,073	6,502	36.27	--	--	--
Livestock and poultry sales 4/	49,242	2,086	23,601	42.73	4	27,411	17.48
Cattle and calves	d	d	d	--	4	25,072	28.11
Milk	d	d	d	--	d	d	d
Hogs and pigs	d	d	d	--	d	d	d
Sheep and lambs	d	d	d	--	0	0	0
Other livestock or poultry	d	d	d	--	0	0	0
Other farm income	38,939	4,051	9,611	23.75	6	11,409	74.44
Government farm payments	35,628	4,051	8,794	25.09	5	11,204	84.16
Custom work, machine hire, and wages from other farms	d	d	d	--	0	0	0
Other farm-related income	1,925	835	2,304	46.56	6	2,072	185.34
Gross cash income from farming	148,683	4,660	31,903	24.01	6	80,258	109.55
Nonfarm income	64,862	4,620	14,038	47.47	4	4,139*	91.19
Nonfarm business	d	d	d	--	0	0	0
Cash wages	d	d	d	--	2	1,416	136.43
Interest and dividends	28,947	4,439	6,521	35.99	3	1,713*	97.16
Other nonfarm income	2,356	1,007	2,340	42.16	2	4,291	131.24

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 73. FARM AND NONFARM INCOME SOURCES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.40

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		farm 1/	2/		farm 1/	2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Crop and livestock sales 4/	692,118	9,727	71,151	23.22	303	90,644*	81.52
Crop sales 4/	324,073	9,319	34,777	22.70	294	63,178*	101.78
Cash grains	274,967	8,965	30,672	26.20	--	--	--
Hay, forage, and seeds	2,263	575	3,938	45.52	--	--	--
Other crops	46,844	4,004	11,700	20.62	--	--	--
Livestock and poultry sales 4/	368,045	5,977	61,578	37.70	205	43,370*	136.20
Cattle and calves	190,244	5,705	33,349	20.62	183	40,444	132.15
Milk	d	d	d	--	27	9,335	80.02
Hogs and pigs	d	d	d	--	37	28,845	136.13
Sheep and lambs	d	d	d	--	24	7,090	83.84
Other livestock or poultry	d	d	d	--	0	0	0
Other farm income	237,504	9,786	24,271	11.55	302	25,689	88.74
Government farm payments	207,531	9,513	21,815	12.32	277	24,848	83.33
Custom work, machine hire, and wages from other farms	9,543	2,702	3,532	25.05	4	32,957	101.82
Other farm-related income	20,429	3,223	6,339	21.45	289	2,578*	163.74
Gross cash income from farming	929,622	9,923	93,681	19.61	305	115,486*	73.63
Nonfarm income	82,768	6,541	12,653	18.91	218	4,428*	316.17
Nonfarm business	24,052	1,407	17,097	33.85	0	0	0
Cash wages	32,079	2,719	11,797	22.91	105	3,822*	202.48
Interest and dividends	23,562	4,533	5,198	40.22	147	3,465	454.13
Other nonfarm income	3,076	850	3,617	44.06	65	1,165*	92.99

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ data may not add due to rounding.

APPENDIX TABLE 74. FARM AND NONFARM INCOME SOURCES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		farm 1/	2/		farm 1/	2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Crop and livestock sales 4/	390,873	6,490	60,225	22.32	133	79,982*	86.00
Crop sales 4/	186,554	6,054	30,816	20.51	128	40,622*	88.97
Cash grains	121,886	5,928	20,561	19.02	--	--	--
Hay, forage, and seeds	d	d	d	--	--	--	--
Other crops	64,241	2,933	21,907	30.92	--	--	--
Livestock and poultry sales 4/	204,319	4,868	41,969	34.30	105	51,790	124.20
Cattle and calves	95,300	3,945	24,159	32.27	101	43,909*	134.80
Milk	29,848	677	44,078	33.53	24	6,249*	86.14
Hogs and pigs	d	d	d	--	16	45,016	139.89
Sheep and lambs	d	d	d	--	17	78	43.67
Other livestock or poultry	d	d	d	--	0	0	0
Other farm income	163,323	6,304	25,907	18.30	133	24,345	83.58
Government farm payments	138,929	6,304	22,038	19.36	123	22,764	68.76
Custom work, machine hire, and wages from other farms	5,536	1,976	2,802	27.23	3	21,950	100.51
Other farm-related income	18,858	3,534	5,336	23.27	123	3,035*	275.00
Gross cash income from farming	554,196	6,490	85,389	20.27	134	103,557*	75.83
Nonfarm income	46,347	5,820	7,964	24.12	99	5,016	242.33
Nonfarm business	18,695	3,012	6,206	43.57	0	0	0
Cash wages	18,049	2,481	7,274	24.66	58	3,511*	187.02
Interest and dividends	3,076	2,848	1,080	24.60	57	3,997	340.38
Other nonfarm income	d	d	d	--	49	1,330	130.55

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ data may not add due to rounding.

APPENDIX TABLE 75. FARM AND NONFARM INCOME SOURCES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.71 OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		farm 1/	2/		farm 1/	2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Crop and livestock sales 4/	193,849	2,986	64,918	19.92	52	62,763	74.88
Crop sales 4/	110,678	2,420	45,739	21.24	44	38,517	95.86
Cash grains	88,654	2,289	38,722	22.92	--	--	--
Hay, forage, and seeds	d	d	d	--	--	--	--
Other crops	18,844	1,430	13,175	24.10	--	--	--
Livestock and poultry sales 4/	83,171	2,003	41,526	33.41	40	39,223	87.20
Cattle and calves	61,859	1,817	34,050	29.19	37	29,738	89.20
Milk	d	d	d	--	14	7,230	65.79
Hogs and pigs	d	d	d	--	6	35,951	142.07
Sheep and lambs	d	d	d	--	4	37,922	157.65
Other livestock or poultry	d	d	d	--	0	0	0
Other farm income	101,642	2,975	34,163	21.23	52	20,112*	101.09
Government farm payments	83,357	2,499	33,355	23.04	48	17,918*	105.19
Custom work, machine hire, and wages from other farms	4,852	1,978	2,453	29.79	3	13,288	86.47
Other farm-related income	13,434	1,453	9,243	36.41	49	2,977*	217.39
Gross cash income from farming:	295,491	3,065	96,397	18.02	52	82,875	69.77
Nonfarm income	42,427	2,352	18,040	39.13	36	4,684*	162.39
Nonfarm business	d	d	d	--	0	0	0
Cash wages	23,950	1,332	17,985	38.63	21	4,870*	163.85
Interest and dividends	2,597	1,530	1,697	35.86	18	2,976	222.18
Other nonfarm income	4,134	831	4,973	39.97	17	752*	93.92

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 76. FARM BUSINESS ASSETS AND LIABILITIES, ALL CLASSES, NORTH DAKOTA, 1986

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		farm 1/	2/		farm 1/	2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Assets:							
Land and buildings owned	4,580,360	20,882	219,346	8.39	497	459,927*	66.70
Operator dwelling	614,777	17,470	35,190	11.67	247	34,184	67.20
Inventories--							
Crop	805,150	22,582	35,655	10.79	489	40,503*	124.04
Livestock and poultry	763,220	13,516	56,469	17.39	324	71,325*	93.52
Purchased inputs	39,886	15,170	2,629	17.88	0	0	0
Machinery, tools, and equipment	1,864,502	24,225	76,966	12.63	496	58,424*	95.83
Other assets	416,092	18,689	22,264	20.34	483	12,091*	202.61
Total assets	8,469,210	24,318	348,269	8.40	497	616,333*	63.10
Liabilities:							
Production credit association:	134,143	2,807	47,796	24.88	--	--	--
Farmers Home Administration	642,756	7,262	88,508	18.84	--	--	--
Banks	587,385	11,925	49,257	14.67	--	--	--
Federal land banks	611,682	6,842	89,403	18.02	--	--	--
Merchants and dealers	21,822	2,484	8,785	23.75	--	--	--
Life insurance companies	d	d	d	--	--	--	--
Individuals who sold land	330,711	4,458	74,190	20.97	--	--	--
Other lenders	114,100	4,189	27,236	38.98	--	--	--
Total liabilities	2,450,539	18,217	134,521	11.50	491	200,033*	82.71
Total equity	6,018,671	24,318	247,499	9.13	497	418,714*	84.93

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 77. FARM BUSINESS ASSETS AND LIABILITIES BY ECONOMIC CLASS, NORTH DAKOTA, 1986.
LESS THAN \$40,000

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Assets:								
Land and buildings owned	446,696	4,161	107,358	29.53	71	244,116*	71.22	
Operator dwelling	102,070	3,508	29,098	33.38	41	27,783	74.72	
Inventories--								
Crop	42,211	4,978	8,480	28.27	68	16,952*	91.58*	
Livestock and poultry	37,272	1,727	21,586	34.46	47	45,539*	65.50*	
Purchased inputs	1,487	2,843	523	32.50	0	0	0	
Machinery, tools, and equipment	158,879	5,648	28,130	23.92	71	27,914	87.52	
Other assets	150,926	4,642	32,511	44.89	67	4,906*	164.05	
Total assets	837,471	5,741	145,875	26.80	71	323,041*	60.12	
Liabilities:								
Production credit association	d	d	d	--	--	--	--	
Farmers Home Administration	d	d	d	--	--	--	--	
Banks	11,010	1,139	9,668	36.93	--	--	--	
Federal land banks	31,645	480	65,962	43.43	--	--	--	
Merchants and dealers	d	d	d	--	--	--	--	
Life insurance companies	0	0	0	--	--	--	--	
Individuals who sold land	d	d	d	--	--	--	--	
Other lenders	d	d	d	--	--	--	--	
Total liabilities	54,983	1,805	30,466	31.58	68	135,959*	87.96	
Total equity	782,487	5,741	136,297	28.45	71	192,827	101.41	

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 78. FARM BUSINESS ASSETS AND LIABILITIES BY ECONOMIC CLASS, NORTH DAKOTA, 1986.
\$40,000-\$249,999

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Assets:								
Land and buildings owned	3,667,035	15,809	231,952	10.10	395	459,318*	56.48	
Operator dwelling	469,696	13,107	35,836	13.90	192	34,712	65.98	
Inventories--								
Crop	624,992	16,595	37,662	12.62	390	38,663	101.73	
Livestock and poultry	643,936	11,183	57,580	20.49	258	71,526*	83.30	
Purchased inputs	32,794	11,791	2,781	21.15	0	0	0	
Machinery, tools, and equipment	1,478,798	17,538	84,320	15.72	394	57,439*	78.79	
Other assets	248,917	13,207	18,847	20.78	385	12,199*	189.83	
Total assets	6,696,472	17,538	381,828	10.39	395	613,393*	50.99	
Liabilities:								
Production credit association	95,227	2,292	41,544	19.91	--	--	--	
Farmers Home Administration	616,252	6,927	88,967	19.48	--	--	--	
Banks	474,106	10,098	46,951	17.33	--	--	--	
Federal land banks	468,082	5,958	78,570	21.03	--	--	--	
Merchants and dealers	13,304	1,509	8,818	24.44	--	--	--	
Life insurance companies	3,581	415	8,636	48.56	--	--	--	
Individuals who sold land	276,087	4,067	67,885	21.48	--	--	--	
Other lenders	109,087	3,880	28,118	40.69	--	--	--	
Total liabilities	2,055,726	15,373	133,723	12.76	392	198,643*	80.05	
Total equity	4,640,746	17,538	264,612	11.24	395	416,259*	73.25	

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 79. FARM BUSINESS ASSETS AND LIABILITIES BY ECONOMIC CLASS, NORTH DAKOTA, 1986.
\$250,000 OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.
		reporting:	reporting:		reporting:	reporting:	
		farm 1/	farm 1/	2/	farm 1/	farm 1/	2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Assets:							
Land and buildings owned	466,629	912	511,851	25.74	31	961,965*	49.93
Operator dwelling	43,011	855	50,281	26.04	14	45,679	56.93
Inventories--							
Crop	137,948	1,009	136,696	30.11	31	115,314	100.30
Livestock and poultry	82,012	606	135,389	31.31	19	132,377	110.00
Purchased inputs	5,605	536	10,464	35.94	0	0	0
Machinery, tools, and equipment	226,825	1,039	218,303	24.10	31	140,823*	84.90
Other assets	16,250	840	19,351	30.29	31	26,281	182.94
Total assets	935,268	1,039	900,130	23.14	31	1,325,518*	47.99
Liabilities:							
Production credit association	d	d	d	na	--	--	--
Farmers Home Administration	d	d	d	na	--	--	--
Banks	102,269	688	148,580	28.92	--	--	--
Federal land banks	111,955	405	276,718	45.48	--	--	--
Merchants and dealers	d	d	d	na	--	--	--
Life insurance companies	d	d	d	na	--	--	--
Individuals who sold land	d	d	d	na	--	--	--
Other lenders	d	d	d	na	--	--	--
Total liabilities	339,830	1,039	327,063	34.20	31	358,161	62.72
Total equity	595,438	1,039	573,068	22.76	31	967,357*	61.07

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 80. FARM BUSINESS ASSETS AND LIABILITIES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986.
CASH GRAIN

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms	Average per:	C.V.	Farms	Average per:	C.V.
		reporting:	reporting:		reporting:	reporting:	
		farm 1/	farm 1/	2/	farm 1/	farm 1/	2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Assets:							
Land and buildings owned	3,068,390	13,793	222,462	8.53	308	502,311*	65.86
Operator dwelling	413,535	10,547	39,208	10.86	147	36,175	71.82
Inventories--							
Crop	658,950	14,762	44,638	12.52	299	45,647	127.08
Livestock and poultry	207,445	6,340	32,723	13.86	143	43,854*	86.53
Purchased inputs	31,939	9,302	3,434	21.13	0	0	0
Machinery, tools, and equipment	1,214,043	15,498	78,336	7.97	305	64,002*	99.38
Other assets	359,702	13,051	27,560	23.10	299	15,179*	184.61
Total assets	5,540,469	15,591	355,363	8.07	306	646,032*	65.37
Liabilities:							
Production credit association	102,749	1,934	53,141	31.21	--	--	--
Farmers Home Administration	317,526	3,751	84,645	15.69	--	--	--
Banks	350,069	6,922	50,571	12.63	--	--	--
Federal land banks	452,442	4,498	100,590	17.97	--	--	--
Merchants and dealers	19,593	2,259	8,672	25.86	--	--	--
Life insurance companies	d	d	d	--	--	--	--
Individuals who sold land	241,375	2,939	82,119	23.24	--	--	--
Commodity Credit Corporation	0	0	0	--	--	--	--
Other lenders	42,901	2,083	20,598	26.46	--	--	--
Total liabilities	1,534,522	10,912	140,626	10.93	302	184,007*	87.52
Total equity	4,005,948	15,591	256,940	9.40	308	464,430*	81.97

- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 81. FARM BUSINESS ASSETS AND LIABILITIES BY PRODUCTION SPECIALTY, NORTH DAKOTA, 1986, BEEF, HOG, OR SHEEP

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Assets:							
Land and buildings owned	947,630	3,615	262,165	28.26	143	382,648*	56.64
Operator dwelling	101,665	3,486	29,166	20.37	79	30,875	56.15
Inventories--							
Crop	93,154	4,168	22,352	31.12	143	27,957	95.50
Livestock and poultry	339,161	3,767	90,032	25.35	141	95,734	85.27
Purchased inputs	5,309	2,906	1,827	45.36	0	0	0
Machinery, tools, and equipment	272,252	4,758	57,221	23.26	143	45,888*	81.37
Other assets	25,380	3,967	6,397	30.65	139	7,354	220.05
Total assets	1,682,886	4,758	353,704	23.56	143	558,037*	52.70
Liabilities:							
Production credit association	21,007	691	30,391	35.96	--	--	--
Farmers Home Administration	198,354	2,344	84,635	46.59	--	--	--
Banks	174,451	2,829	61,676	37.53	--	--	--
Federal land banks	57,816	577	100,246	45.31	--	--	--
Merchants and dealers	d	d	d	--	--	--	--
Life insurance companies	d	d	d	--	--	--	--
Individuals who sold land	50,514	811	62,255	47.65	--	--	--
Commodity Credit Corporation	0	0	0	--	--	--	--
Other lenders	27,220	477	57,053	49.96	--	--	--
Total liabilities	530,919	4,156	127,748	29.10	142	219,701*	73.53
Total equity	1,151,967	4,758	242,117	27.03	143	339,873*	75.18

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ data may not add due to rounding.

APPENDIX TABLE 82. FARM BUSINESS ASSETS AND LIABILITIES BY PRODUCTION SPECIALTY, NORTH DAKOTA, ALL OTHER LIVESTOCK

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent
Assets:							
Land and buildings owned	558,753	3,437	162,561	31.30	29	321,528*	70.70
Operator dwelling	d	d	d	--	15	29,884	58.79
Inventories--							
Crop	41,984	3,236	12,973	27.09	29	27,566*	74.22
Livestock and poultry	216,614	3,409	63,540	46.46	29	88,453*	58.73
Purchased inputs	2,262	2,547	888	39.11	0	0	0
Machinery, tools, and equipment	d	d	d	--	29	46,090	91.66
Other assets	17,014	1,255	13,562	35.85	26	4,583*	296.39
Total assets	1,199,030	3,553	337,428	39.37	29	487,747	65.53
Liabilities:							
Production credit association	d	d	d	--	--	--	--
Farmers Home Administration	126,876	1,167	108,696	49.42	--	--	--
Banks	d	d	d	--	--	--	--
Federal land banks	d	d	d	--	--	--	--
Merchants and dealers	d	d	d	--	--	--	--
Life insurance companies	0	0	0	--	--	--	--
Individuals who sold land	d	d	d	--	--	--	--
Other lenders	d	d	d	--	--	--	--
Total liabilities	384,540	3,112	123,586	45.68	29	222,792*	48.76
Total equity	814,489	3,553	229,212	38.66	29	264,955	122.71

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ data may not add due to rounding.

APPENDIX TABLE 83. FARM BUSINESS ASSETS AND LIABILITIES BY TYPE OF FARM ORGANIZATION, NORTH DAKOTA, 1986

Item	Farm Cost and Returns Survey ^{5/}								
	Partnership				Individual operation				
	Total	Farms reporting	Average per farm 1/	C.V. 2,3/	Total	Farms reporting	Average per farm 1/	C.V. 2,3/	
	1,000 dollars	Number	Dollars	Percent	1,000 dollars	Number	Dollars	Percent	
Assets:									
Land and buildings owned	736,488	1,898	388,126	29.19	3,813,724	18,845	202,378	8.81	
Operator dwelling	61,521	1,901	32,361	25.84	547,151	15,429	35,462	12.99	
Inventories--									
Crop	100,916	2,355	42,847	30.55	659,533	20,063	32,873	12.08	
Livestock and poultry	122,062	1,193	102,305	41.89	631,928	12,271	51,496	19.64	
Purchased inputs	4,299	1,561	2,754	30.85	35,151	13,484	2,607	20.18	
Machinery, tools, and equipment	270,907	2,555	106,049	22.96	1,556,475	21,456	72,542	14.84	
Other assets	43,825	1,992	22,001	39.47	365,147	16,534	22,085	22.60	
Total assets	1,278,497	2,555	500,478	26.27	7,061,959	21,549	327,714	9.30	
Liabilities:									
Production credit association	d	d	d	--	126,158	2,611	48,322	26.29	
Farmers Home Administration	8,109	193	42,040	48.63	611,317	6,967	87,748	19.61	
Banks	53,857	748	71,960	34.18	512,632	11,000	46,605	16.34	
Federal land banks	d	d	d	--	546,213	6,432	84,924	18.95	
Merchants and dealers	d	d	d	--	18,356	2,417	7,595	24.06	
Life insurance companies	0	0	0	--	d	d	d	--	
Individuals who sold land	d	d	d	--	262,016	4,223	62,049	19.77	
Other lenders	d	d	d	--	110,616	3,992	27,710	40.18	
Total liabilities	207,063	1,158	178,852	45.77	2,195,250	16,882	130,035	12.21	
Total equity	1,071,434	2,555	419,421	28.72	4,866,709	21,549	225,842	9.81	

-- = not applicable or available. d = insufficient data for disclosure.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ Data may not add due to rounding.
- 5/ Data from Farm Business Management Membership not available.

APPENDIX TABLE 84. FARM BUSINESS ASSETS AND LIABILITIES BY ACRES OPERATED, NORTH DAKOTA, 1986, 500 ACRES OR LESS

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Assets:								
Land and buildings owned	433,556	3,682	117,745	30.76	29	197,538	86.78	
Operator dwelling	91,430	3,015	30,325	36.25	14	29,170	78.47	
Inventories--								
Crop	45,636	4,510	10,119	28.79	28	13,318	130.74	
Livestock and poultry	24,142	1,306	18,485	45.81	15	39,369	127.13	
Purchased inputs	d	d	d	--	0	0	0	
Machinery, tools, and equipment	112,885	5,064	22,291	29.14	29	33,447	99.94	
Other assets	148,328	4,175	35,528	45.64	28	7,373*	130.21	
Total assets	765,837	5,157	148,498	28.73	29	271,326*	76.37	
Liabilities:								
Production credit association	d	d	d	--	--	--	--	
Farmers Home Administration	d	d	d	--	--	--	--	
Banks	7,577	803	9,433	46.26	--	--	--	
Federal land banks	59,613	624	95,483	49.14	--	--	--	
Merchants and dealers	d	d	d	--	--	--	--	
Life insurance companies	0	0	0	--	--	--	--	
Individuals who sold land	d	d	d	--	--	--	--	
Other lenders	d	d	d	--	--	--	--	
Total liabilities	108,077	1,642	65,833	44.44	27	105,571	108.09	
Total equity	657,760	5,157	127,542	32.60	29	173,035	105.55	

-- = not applicable or available. d = insufficient data for disclosure.

- 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
- 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
- 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
- 4/ data may not add due to rounding.

APPENDIX TABLE 85. FARM BUSINESS ASSETS AND LIABILITIES BY ACRES OPERATED, NORTH DAKOTA, 1986, 501-1,000 ACRES

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2/	3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Assets:								
Land and buildings owned	1,173,522	6,538	179,496	23.49	131	321,897*	56.79	
Operator dwelling	183,758	5,740	32,011	32.61	61	32,438	76.11	
Inventories--								
Crop	202,071	6,519	30,995	29.95	126	28,908	109.25	
Livestock and poultry	d	d	d	--	75	46,689	76.95	
Purchased inputs	d	d	d	--	0	0	0	
Machinery, tools, and equipment	530,011	7,088	74,776	40.32	130	39,091*	84.57	
Other assets	51,508	4,398	11,711	25.69	126	8,585	290.87	
Total assets	2,146,849	7,088	302,885	25.96	131	423,482*	51.02	
Liabilities:								
Production credit association	d	d	d	--	--	--	--	
Farmers Home Administration	223,253	2,612	85,470	46.44	--	--	--	
Banks	154,860	4,401	35,189	40.27	--	--	--	
Federal land banks	d	d	d	--	--	--	--	
Merchants and dealers	3,343	499	6,701	43.08	--	--	--	
Life insurance companies	d	d	d	--	--	--	--	
Individuals who sold land	121,948	1,347	90,529	40.96	--	--	--	
Other lenders	d	d	d	--	--	--	--	
Total liabilities	708,053	6,001	117,998	31.97	130	145,284	85.74	
Total equity	1,438,796	7,088	202,991	25.19	131	279,307*	86.49	

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 86. FARM BUSINESS ASSETS AND LIABILITIES BY ACRES OPERATED, NORTH DAKOTA, 1986, 1,000 OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2/	3/
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Assets:								
Land and buildings owned	2,973,282	10,662	278,869	8.99	337	536,162*	60.25	
Operator dwelling	339,588	8,715	38,968	8.81	172	35,211	63.58	
Inventories--								
Crop	557,442	11,552	48,255	10.34	335	47,136	118.76	
Livestock and poultry	559,309	8,227	67,988	15.86	234	81,270*	89.13	
Purchased inputs	28,628	7,855	3,645	13.87	0	0	0	
Machinery, tools, and equipment	1,221,606	12,073	101,187	8.21	337	68,031*	90.78	
Other assets	216,256	10,116	21,378	23.41	329	13,835*	180.98	
Total assets	5,556,525	12,073	460,252	8.05	337	720,987*	56.49	
Liabilities:								
Production credit association	119,480	2,192	54,514	27.57	--	--	--	
Farmers Home Administration	393,295	4,296	91,550	16.70	--	--	--	
Banks	424,948	6,721	63,227	15.37	--	--	--	
Federal land banks	402,918	3,650	110,389	18.13	--	--	--	
Merchants and dealers	17,760	1,422	12,490	27.97	--	--	--	
Life insurance companies	d	d	d	--	--	--	--	
Individuals who sold land	201,909	2,980	67,754	24.10	--	--	--	
Other lenders	67,091	2,109	31,808	26.13	--	--	--	
Total liabilities	1,634,410	10,575	154,560	10.58	334	228,979*	76.29	
Total equity	3,922,115	12,073	324,872	9.88	337	494,047*	76.50	

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 87. FARM BUSINESS ASSETS AND LIABILITIES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, NO DEBT

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Assets:								
Land and buildings owned	798,514	4,535	176,067	20.51	6	482,423	106.42	
Operator dwelling	83,922	3,825	21,940	23.87	2	8,500*	24.96	
Inventories--								
Crop	54,490	3,488	15,624	22.35	6	52,542	107.75	
Livestock and poultry	143,733	2,594	55,419	40.66	5	49,312	63.61	
Purchased inputs	4,181	2,270	1,841	32.91	0	0	0	
Machinery, tools, and equipment	236,797	4,386	53,987	24.79	6	60,285	63.98	
Other assets	647,350	4,585	141,197	30.77	6	24,998*	66.81	
Total assets	1,885,065	4,812	391,718	22.60	6	661,342	91.50	
Liabilities:								
Production credit association	0	0	0	--	--	--	--	
Farmers Home Administration	0	0	0	--	--	--	--	
Banks	0	0	0	--	--	--	--	
Federal land banks	0	0	0	--	--	--	--	
Merchants and dealers	0	0	0	--	--	--	--	
Life insurance companies	0	0	0	--	--	--	--	
Individuals who sold land	0	0	0	--	--	--	--	
Other lenders	0	0	0	--	--	--	--	
Total liabilities	0	0	0	--	0	0	0	
Total equity	1,885,065	4,812	391,718	22.60	6	661,342	91.50	

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 88. FARM BUSINESS ASSETS AND LIABILITIES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.01-0.40

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership			
	Total	Farms reporting	Average per reporting farm 1/	C.V. 2/	Farms reporting	Average per reporting farm 1/	C.V. 2,3/	
	1,000 dollars	Number	Dollars	Percent	Number	Dollars	Percent	
Assets:								
Land and buildings owned	3,299,880	12,816	257,477	11.26	305	512,739*	65.43	
Operator dwelling	342,312	10,569	32,389	13.84	137	34,516	72.38	
Inventories--								
Crop	467,805	12,648	36,993	13.51	303	48,984*	119.58	
Livestock and poultry	727,458	8,914	81,611	20.24	184	68,110*	95.64	
Purchased inputs	30,121	7,349	4,099	15.78	0	0	0	
Machinery, tools, and equipment	1,087,309	12,567	86,521	11.55	304	67,841*	93.97	
Other assets	1,604,941	12,833	125,065	20.06	297	13,877*	185.17	
Total assets	7,217,513	13,295	542,886	11.68	305	683,623*	62.67	
Liabilities:								
Production credit association	173,192	3,103	55,815	38.71	--	--	--	
Farmers Home Administration	106,322	1,370	77,580	29.02	--	--	--	
Banks	244,572	6,128	39,908	18.40	--	--	--	
Federal land banks	295,953	3,384	87,459	19.02	--	--	--	
Merchants and dealers	54,287	3,485	15,578	24.16	--	--	--	
Life insurance companies	d	d	d	--	--	--	--	
Individuals who sold land	138,973	2,946	47,181	28.92	--	--	--	
Other lenders	13,352	1,355	9,856	34.00	--	--	--	
Total liabilities	1,027,135	12,662	81,122	11.97	305	129,858*	87.84	
Total equity	6,190,379	13,295	465,627	12.19	305	553,765*	65.09	

-- = not applicable or available. d = insufficient data for disclosure.
 1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.
 2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.
 3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.
 4/ data may not add due to rounding.

APPENDIX TABLE 89. FARM BUSINESS ASSETS AND LIABILITIES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.41-0.70

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		Number	Dollars	Percent	Number	Dollars	Percent
	1,000 dollars						
Assets:							
Land and buildings owned	1,087,343	5,844	186,074	18.23	134	402,644*	57.80
Operator dwelling	126,665	4,030	31,427	24.35	80	33,088*	1.29
Inventories--							
Crop	203,270	5,309	38,291	23.44	130	27,767*	102.70*
Livestock and poultry	292,563	3,819	76,611	38.17	96	84,195	92.81
Purchased inputs	13,963	3,470	4,024	24.89	0	0	0
Machinery, tools, and equipment	388,714	6,280	61,898	17.21	134	47,139*	84.12
Other assets	187,392	5,847	32,047	34.04	131	7,942*	236.96
Total assets	2,173,246	6,280	346,065	16.49	134	544,804*	53.39
Liabilities:							
Production credit association	38,537	710	54,278	49.16	--	--	--
Farmers Home Administration	409,319	2,725	150,204	35.17	--	--	--
Banks	243,228	3,828	83,539	25.80	--	--	--
Federal land banks	228,480	3,121	72,576	25.65	--	--	--
Merchants and dealers	8,388	1,340	6,260	34.25	--	--	--
Life insurance companies	d	d	d	--	--	--	--
Individuals who sold land	125,624	2,000	62,804	27.36	--	--	--
Other lenders	d	d	d	--	--	--	--
Total liabilities	1,090,138	6,280	173,592	18.19	134	290,752*	54.19
Total equity	1,083,107	6,280	172,473	15.68	134	254,052*	59.16

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ data may not add due to rounding.

APPENDIX TABLE 90. FARM BUSINESS ASSETS AND LIABILITIES BY DEBT/ASSET RATIO, NORTH DAKOTA, 1986, 0.71 OR MORE

Item	Farm Cost and Returns Survey				Farm Bus. Mgmt. Membership		
	Total	Farms reporting	Average per reporting	C.V.	Farms reporting	Average per reporting	C.V.
		Number	Dollars	Percent	Number	Dollars	Percent
	1,000 dollars						
Assets:							
Land and buildings owned	339,009	2,077	163,222	26.16	52	295,184*	52.79
Operator dwelling	53,978	1,546	34,923	37.10	28	37,520	67.97
Inventories--							
Crop	d	d	d	--	50	20,775	73.77
Livestock and poultry	97,937	1,603	61,098	41.70	39	57,638	62.33
Purchased inputs	d	d	d	--	0	0	0
Machinery, tools, and equipment	101,112	2,305	43,868	26.30	52	32,233*	67.24
Other assets	8,821	1,470	6,001	37.94	49	10,779	274.69
Total assets	685,853	2,380	288,123	27.98	52	400,779*	44.80
Liabilities:							
Production credit association	d	d	d	--	--	--	--
Farmers Home Administration	456,844	1,736	263,192	38.00	--	--	--
Banks	100,474	1,678	59,883	36.57	--	--	--
Federal land banks	d	d	d	--	--	--	--
Merchants and dealers	d	d	d	--	--	--	--
Life insurance companies	0	0	0	--	--	--	--
Individuals who sold land	d	d	d	--	--	--	--
Other lenders	d	d	d	--	--	--	--
Total liabilities	678,295	2,343	289,540	31.95	52	377,863*	51.16
Total equity	7,558	2,380	3,175	1085.34	52	22,916	511.69

-- = not applicable or available. d = insufficient data for disclosure.

1/ Average per reporting farm is defined as the mean per farm reporting the item in the sample.

2/ The coefficient of variation provides a means of evaluating survey results. The smaller the C.V. the greater the reliability of the estimate.

3/ * signifies averages per reporting farm which are statistically different between the two samples at p=.01.

4/ data may not add due to rounding.