

**The Impact of the Minnesota
Adult Farm Management Education Program
on Farm Family Survival:
A Study in Crisis Prevention and Intervention**

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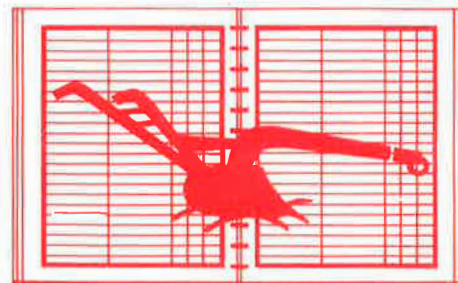


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THE STUDY

Acknowledgements

I join my colleagues who contributed to this study in expressing our heartfelt thanks to those whose volunteer effort made the study possible.

This study involved a lot of people doing extraordinary things to gather the data necessary for studying the impact of a farm management program throughout the state. John Murray, Specialist in Agriculture for the State Board of Vocational and Technical Education requested from, cajoled and pleaded with the busy cadre of adult teachers of agriculture until they all responded to his request for information about farm crisis intervention activities. Teachers selected at random from all coordinator areas in turn contacted over a thousand farm management enrollees in person, by mail and by phone. And the farm families who responded deserve a special thanks for reaching into the depths of their perceptions to share with us how they felt about their association with farm management education.

The adult advisory committee had an interesting chore searching in the archives of their county papers to determine who had auctioned farm property or had been subject to legal foreclosure. In turn the coordinators turned to their archives to determine if any of those identified had been members of the management education program.

All of this happened between October and December 15 of 1986. It was a massive task done voluntarily and cheerfully by agricultural education professionals who believe in what they are doing, and do it well.

We thank you for your efforts and for your patience in waiting for this final report.

Edgar Persons
Principal Author

Prologue

This study was an attempt to answer important questions before they were asked. Education in this state and all others, and indeed in the entire world is a costly enterprise. It consumes one of the largest shares of the budget of government at the state and local level. People frequently pose the question "Does education pay?" Few would argue that it is not needed, but many would question how much and for whom the education dollar should be spent, given that the dollars are in limited supply. Few would attempt to weigh the benefits against the costs in any real terms.

But there are some kinds of education where the results are fairly immediate and can be partially translated into economic terms. These are the programs with which this study deals; the farm management education programs for adult farm families.

This is a study of impact. It attempts to measure in several ways if the expenditure for educational programs has had an impact on those persons the programs were designed to serve. It measures not only the processes that occurred as a result of economic investment, but the product of that investment - are those whom the program touched different because of it? There was an adjustment in the process because of the agricultural crisis. The question is if adjustments in process led to impact on people in crisis.

This study will demonstrate that there was indeed impact. In every measure of impact, those who were touched by the programs were better able on the average to cope with financial crisis than those who were not participants.

Legislators who had the wisdom to provide for program expansion, maintenance and redirection will be pleased to see the impact of their action. Administrators at state and local levels will be reassured that while they have not solved the problems of rural America, programs which they administer are aiding in the solutions.

Education does not cost - it pays! It is an investment in Minnesota's present and future. It protects and multiplies the worth of our most valuable resource - people.

THE IMPACT OF THE MINNESOTA FARM MANAGEMENT EDUCATION PROGRAM ON
FARM FAMILY SURVIVAL: A STUDY IN CRISIS PREVENTION AND
INTERVENTION.

INTRODUCTION

The management education program for farmers is not new. The basic concepts on which it is based had their trial in the veterans training programs following World War II. These same concepts guide the implementation and operation of programs in the decade of the 80's just as they did in the decade of the 40's. It is based on theoretical concepts of education that have been proven time and again to work effectively with adult populations. Even some of the measures of farm organization and efficiency used in the analyses of the farm business date to an era before the Great Depression. Yet modern studies have demonstrated their ability to define the earnings and progress of the farm family of the 80's with equal clarity.

Nor is it a new idea to show concern about impact. Cvancara¹ as early as 1964 did a matched pairs study to ascertain if farmers received value from their instruction. His study showed an advantage in gross income of about \$500 per year for farmers in the management education program after costs of attending had been deducted. Rolloff,² testing for impact among farmers in Ohio, showed a benefit cost ratio of about \$53 to 1 for farmers and community expenditures on management education. The Rolloff study, however, exaggerated benefits and minimized cost making the true benefit-cost ratio lower than reported, but still highly positive.

In Minnesota, there have been four major studies following Cvancara's initial effort. All have used different methodology and all have arrived at similar conclusions regarding impact. The Persons et.al.³ study was the most exhaustive. It used a sophisticated benefit cost formula and curvilinear regression to establish the benefit to farmers. The over 3000 farm records examined in this study showed an impact as measured by benefit cost ratio of about 4:1 for an individual farmer and 2:1 for the community when only farmer net returns to labor and management were considered as benefits. When stimulated business activity was the benefit measure, the benefit cost ratio rose to 9:1. A different approach was followed by Richardson⁴. He chose to ask more questions about program quality and to examine program content. Rather than examine farm records as was done in the Persons, Rolloff and Cvancara study, Richardson asked farmers about their perceptions of the monetary value of the program. They reported a range in monetary value from 0 to \$15,000 per year with an average value of \$3000-\$5000. The major benefit of the Richardson study was in the valuing and ranking of the kinds of activities farmers thought important.

Farmers ranked activities that had reference to financial management (record keeping, analysis, tax planning, etc,) highly. Richardson's study was restricted to farmers who were currently enrolled in a farm management education program. Shiflet ⁶, using essentially identical procedures and techniques, followed the Richardson effort by studying the responses of persons who had dropped out of management education programs for numerous reasons. It was interesting to note that those who dropped out gave similar responses to their priority for content and their perception of value as did those who were currently enrolled. There were, however, a larger number who gave less positive responses about the value of the program to their own farm business.

Thome ⁴ used still another approach. His target study group was veterans who had participated in the Viet Nam veterans training program. Like the other studies, his conclusions called attention to the gains that had been made by the veterans in getting established. His study group showed a gain in earning of about \$800 per year adjusted for general economic inflation and reported in constant dollars. This is particularly significant since during this period, the earnings of the average Minnesota farmer measured in constant dollars, fell \$283/yr.

The latest study was done in conjunction with a Project Support/Project Survival⁷ report to the legislature on the service to farmers. This report, presented to a legislative committee in 1986 was primarily a quantitative report, showing the number of clients who had been served and the hours of work contributed to assisting FmHA offices in meeting the demands of clients. No attempt was made in that report to draw judgmental conclusions about the economic worth of the farm management education program or its impact on crisis prevention and intervention.

Since the last report to the legislative committee the full body of the legislature has once again shown confidence in the farm management education program by appropriating substantial funds for program expansion and maintenance. It was not the first show of confidence. In a prior year the Minnesota legislator funded vocational agriculture farm management and the Minnesota Extension Service in a joint proposal to ease the farm crisis. Earlier legislation, creating the Farm Security Program for Beginning Farmers, had a provision to make farm management education mandatory for loan recipients. A similar story can be told about crisis legislation that reduces interest payments and involves farms in special financing provisions. These legislative acts also require participation in farm management programs.

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THE PROBLEM AND OBJECTIVES

The evidence supporting public expenditure on farm management education is positive and strong. The benefit-cost ratio exceeds that of almost any other public and most private investments. But the evidence has been gathered in a different era and in different economic times. Do management education programs for farmers today have the same positive impact? What evidence is there that the management programs have had impact on individual farmer crisis prevention or on crisis intervention? Are farmers who are part of management education programs better able to deal with the agricultural crisis than those who are not? One might also ask what quantitative effect the infusion of new money has had? Have more people been served? How many?

It is likely that in the long term the real proof of crisis prevention and intervention will show in the number of farm operator survivors and in the quality of their business life. But decision makers in education and in policy development positions cannot wait for the long term. They must have more immediate clues upon which to base decisions about current and short term public support. To provide those clues, this study addressed the following specific research questions.

1. What was the quantitative result of increased financial support? How has the status of programs changed in regard to:
 - a) the number of full time equivalent farm management educators.
 - b) the number of farmers enrolled in farm management programs.
 - c) the number of analyses completed for Minnesota farmers.
 - d) the number of contacts with farmers in crisis utilizing one or more of the financial planning tools provided by FINPACK software.
 - e) service to farmers through cooperation with FmHA Offices
 - f) service in farm mediation through professional service as financial analyst or mediators.
2. What is the current financial condition of farms by area as shown by the area analysis summaries? Is there evidence that farmers in management programs have slowed the progress of income and net worth deterioration when compared to the general population of farmers?
3. Is there a difference in the rate of business closure (with or without loss to creditors) between farmers in management programs and those not enrolled?
4. What perceptions do farmers have about the value of farm management education programs in relation to their ability to cope with the current crisis. Are these same perceptions held by creditors in rural communities?

STUDY METHODOLOGY

It is obvious from the variety of questions that were asked about the farm management education program that no single source of data collection or technique was sufficient to supply all of the data. Thus a variety of techniques, seeking information from a variety of sources were employed.

There were 8 primary sources of data for this study.

1. Farmers enrolled in farm management education programs at the time of the study (Fall - 1986)
2. Summaries of farm business record analysis data as published each year by the agricultural coordinator in each analysis area.
3. Archives of farm record data maintained by area agricultural coordinators.
4. Records of the State Department of Agriculture.
5. Records of the agricultural section of the State Board of Vocational and Technical Education.
6. Records from individual Farm Business Management instructors.
7. Archives of newspapers and advertising papers where official records of business foreclosures and public auctions were published.
8. Creditors employed in farm credit granting institutions in selected towns in Minnesota.

Even a casual perusal of the list would suggest that some sources provided only selected bits of information while other specially selected sources provided major data for this study. The major data were obtained by sampling.

The Sampling Process.

The data collected in this study were not all obtained by random process. Some were from a deliberate sample.

The information on auctions and foreclosures was obtained from all of the counties in which a member of the adult agriculture advisory committee member resided. Fourteen counties were included in this portion of the survey. They are shown on the map on Figure 1. The thirteen members of the advisory committee served as the data collection enumerators for this portion of the

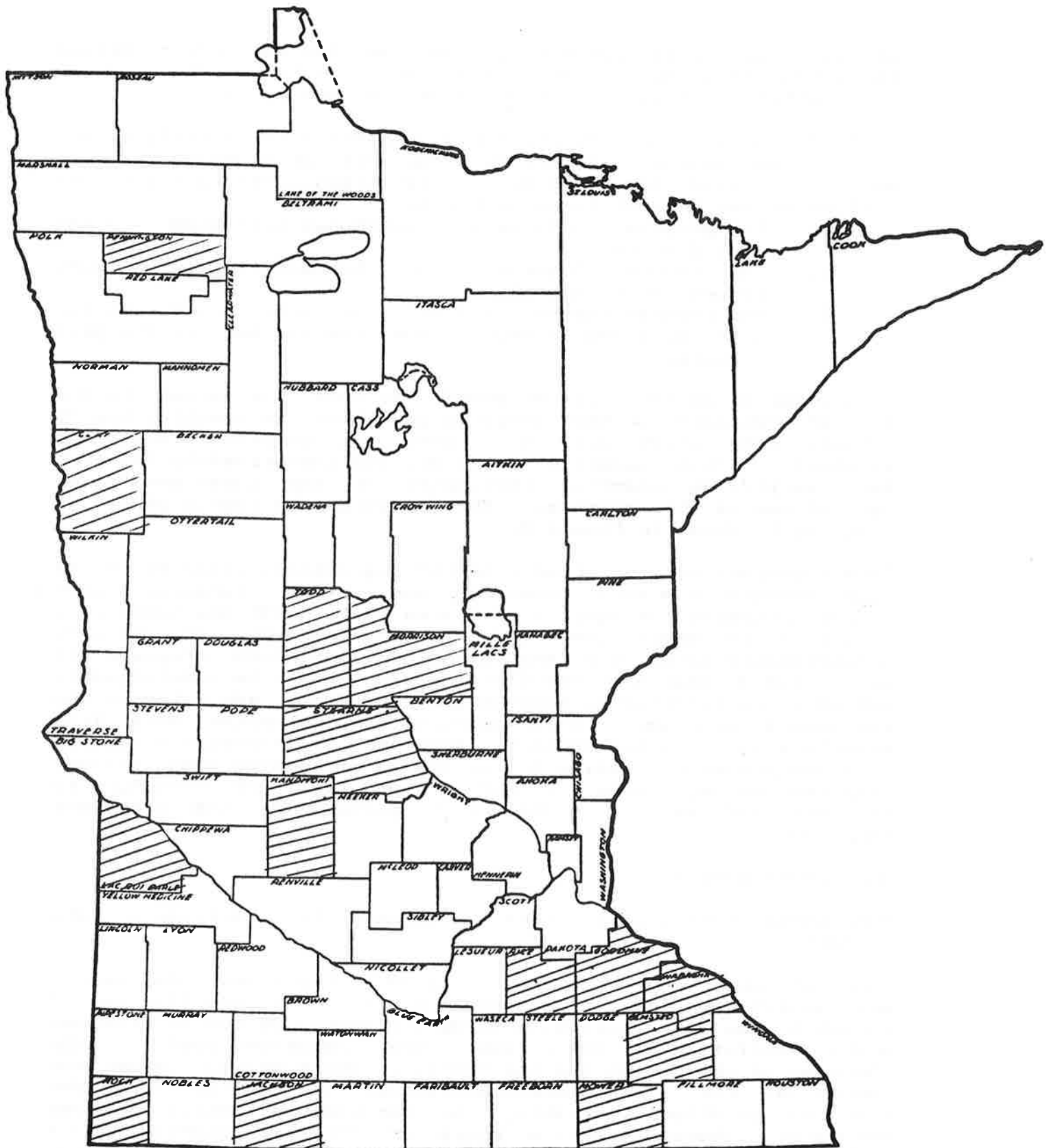


Figure 1. Adult Advisory Committee Counties of Residence - 1986.

study. One area coordinator not on the advisory committee collected data on foreclosures and auctions to provide representation of farmers in North Western Minnesota.

Each of the area coordinators was requested to randomly select two farm management instructors from his area whose students would be asked to respond. To be eligible for selection the instructor had to meet three criteria:

1. The program had to be in continuous operation for the past 8 years.
2. The current instructor had to have at least 3 years tenure in the school.
3. The program had to have met the state guidelines for enrollment and number of analyses for each of the past 3 years.

This group of 12 randomly selected teachers was added to the thirteen teachers on the advisory committee to identify the 25 schools from which all farm management enrollees would be surveyed. This sampling scheme exposed approximately 875-1000 farm families as potential recipients of the questionnaire on perceptions of the program. The locations by county of all 25 programs is shown in Figure 2.

Farm creditors were selected from the suggestions given by twenty five teachers who were chosen to survey their farmers. Each teacher provided the agricultural area coordinator the names of 2 creditors in their town or community whom they thought were knowledgeable about the farm management education program. It was stressed that the creditors needed only to be knowledgeable but were not expected to necessarily be strong advocates of the management program. Area coordinators collected data from creditors by personal contact, although the everyday stress of business prevented creditors from always responding when visited. Prepared surveys were in some cases left for creditors to complete and mail. Eighty-eight percent of the creditors responded.

Instrument Design:

Two basic instruments were designed to facilitate data collection.

The instruments for recording data on auctions and foreclosures were almost identical. Enumerators had to check the time period to which the data applied, provide the source of the information and a description of the action. When recording auctions only the name of the person and the county in which he/she resided was requested. For foreclosures additional information about the kind of creditor initiating the foreclosure notice was also requested. There was also a space for the area coordinator to indicate if the person was a member of the farm management education program. A copy of each form is in Appendix B.

The instrument for use with farmers, except for program profile data, was taken almost verbatim from the instrument used by Richardson in his 1979 study. Since it was important to know if farmer attitude was different now in a period of crisis then it was in 1979, whenever possible individual questions and series of questions were left intact. There were only one or two minor additions to reflect concerns that surfaced in the past few years. A portion of the Richardson study requiring a Q-sort technique was not used. In portions of the report of findings of this study you will find reference to Richardson data for comparison purposes.

A copy of the questionnaire used in this study and a copy of the Richardson questionnaire is included in Appendix B.

The questionnaire for creditors is identical in concept to the assessment section of the questionnaire for farmers. Wording of items was changed only enough to ask for the creditors' opinion about the program in relation to farmers' opinion. The farmer profile data were not included in the creditors questionnaire. A sample is in Appendix B.

Data Collection Procedures:

The Agricultural Adult Advisory Committee was briefed on the data collection procedures in a 1 1/2 hour training session. The purposes and objectives were reviewed as well as the specific instructions for enumeration. Forms and a brief cover letter for gathering information on auctions and foreclosures were sent approximately the first week of October. Frequent telephone contact was maintained to speed the collection process. Data were obtained for foreclosures in fourteen counties with a single piece of property in each of two other counties, giving information from a total of 16 counties. Foreclosure notices for 126 farmers were included in the reports.

Information from farmers was obtained by making each of the teachers selected responsible for delivering the questionnaires to his/her constituents. No record was kept of the number of questionnaires actually delivered, since some were sent by mail, some handed out in class and some delivered during the home visit. It is estimated that between 875 and 1000 questionnaires were available to farmers. About 615 were included in the analysis. A small number (less than 20) were received after the data analysis was complete.

Collection of data for creditors was initiated by a personal visit by the area agricultural coordinator. While most of the data were collected during the visit, some surveys were mailed to the coordinator at a later date. Forty four of the 50 creditors responded.

Other data were collected either from public record or through personal or telephone contact. Some information was supplied directly by Mr. Murray who had collected it either from his own records or through contact with teachers under his supervision.

Data Analysis Procedures:

Data were analyzed using the StatPak Software program and the Compaq computer supplied as part of the management program augmentation.

Much of the economic data were analyzed on a simple spreadsheet using Lotus 1-2-3. All data were descriptive only.

FINDINGS: PRESENTATION OF DATA.

Profile of Enrollees:

Common questions from persons unfamiliar with farm management education programs are "who does the program serve?" and "What are the students like?" Individual instructors could answer without hesitation about their own individual programs, but they may be unsure if the program they managed was typical of other programs in the state.

To provide a profile of participants in the farm management program, the 615 farm families who responded to the questionnaire provided data on themselves and their farm business. The questionnaire was completed by 163 females and 505 males indicating that in some cases (56) more than one person supplied the information requested. This section of the report shows the profile of farm management enrollees in October of 1986. The information is from a broad cross section of the enrollment in the state and represents roughly 20 percent of the families enrolled at the time of the survey.

This profile should be viewed cautiously. It represents enrollees in older, well established farm management programs and does not include persons in new programs or programs where the instructor was new. A random sample of farm families enrolled in the program would show a different profile in some aspects since families in newer programs would not have had the opportunity to be continuously enrolled for any extended length of time.

Table 1. Farm Family Profile of Members of Well Established Farm Management Programs: A Summary.

	Mean	Range Min. Max.	
Number of people in the business	2.33	1	6
Number of females in the business	1.02	0	3
Number of males in the business	1.31	1	4
Average age of females	38.9	19	72
Average age of males	38.9	17	81
Average years of school completed - Females	13.1	8	18
Average years of school completed - Males	12.8	8	18
Years of H.S. vo-ag completed - Females By those who reported some H.S. vo-ag; 339 reporting of 628	.64	-	-
Years of H.S. vo-ag completed - Males By those who reported some H.S. vo-ag; 604 reporting of 802	2.42	-	-
Number of Females with Education in Ag. beyond high school	37.	*	*
Number of Males with Education in Ag beyond high school	196.	*	*
Years in Farm Mgt. Education program	9.1	1	31
Acres if owned (avg. tillable 271) No:528	318.	0	1800
Acres if rented (avg. tillable 338) No:515	372.	0	2200
Average acres farmed-both owned and rented by all cooperators.	516.		

*Data not available or confounded.

Expanded Profile of Selected Measures:

Some characteristics of farm management enrollees are not well represented by simple averages or ranges; the distribution tells a better story about the enrollees. To provide detail on some of the key measures, additional tables are incorporated in Appendix A on age distribution, education distribution, farm size

distribution and tenure in the management education program.
Types of Farms Served:

Agriculture in Minnesota is very diversified. While individual farms may be quite specialized, in the aggregate they are a diverse group. To illustrate the diversity of farms served in the management education program, farmers were asked to indicate what kind of farm they thought they had. They were to check up to three different descriptions of crop and livestock organization. If they thought even three descriptors did not describe their farm, they were to check diversified. Table 2 reports the farmers' perceptions of the kind of farm they thought they had.

Table 2. Self Perception of Type of Farm by Farm Management Enrollees

Type of Farm	Number n=568
Dairy	90
Dairy, Hogs	21
Dairy, Beef	8
Dairy, Other livestock	7
Dairy, Cash Crops	65
Dairy, Hogs, Beef	4
Dairy, Hogs, Other livestock	2
Diary, Hogs, Cash Crop	25
Dairy, Beef and Cash Crop	7
Hogs	23
Hogs & Beef	8
Hogs & Other Livestock	2
Hogs & Cash Crop	97
Hogs, Sheep & Cash Crop	3
Beef	3
Beef & Cash Crop	33

Table 2 (continued)

Sheep	1
Sheep & Cash Crop	6
Other livestock & Cash Crop	1
Other livestock, Cash Crop & Veg/Fruit	1
Cash Crops	123
Fruits & Vegetables	1
Dairy, other livestock, Cash Crops	16
Other combinations	6
Diversified	15

It has been a common phenomena that farmers beget farmer. More than 85 percent of the farmers are known to be sons of farmers with another 4-6 percent of the principal farm operators known to be daughters of farmers. Farm land also gets passed from generation to generation. To illustrate the roots that farm management enrollees have in farming, each was asked how many generations of their family had farmed the land or a portion of land they now farmed. The results are interesting, and help one to understand why, even in the face of adversity, farmers are reluctant to leave the land. Table 3 shows the generational connections of the farm management families with the land they farm.

Table 3. The Number of Generations of Family that have Farmed Land Now Operated by Farm Management Enrollees.

No. of Prior Generations of The Family Operating The Present Farm.	No. of Families n = 544
1	136
2	174
3	156
4	59
5	11
6	3

It is with some pride that families look back over many generations of stewardship of farm land. To have a designated Century Farm is a mark of great accomplishment. To operate a farm that was claimed even before Minnesota became a State must give a great sense of satisfaction. Farmers were asked in this survey to report when the farm land they now farm was first purchased by a member of their family. Table 4 gives some sense of what it means to have a farm that has been in the family for many generations.

Table 4. The Date of Purchase by a Family Member of Farm Land Now Farmed by Management Education Enrollees.

Period of Purchase	No. of Families Reporting n=475
Before 1860	5
1860 - 1879	28
1880 - 1899	44
1900 - 1919	54
1920 - 1939	84
1940 - 1959	142
1960 - 1979	97
1980 - Present	21

Program Growth and Expansion:

An understanding of the profile of farm management education enrollees will be helpful in the future development of programs for farmers. But of greater importance is the ability of the educational system to respond to stimulation by legislative augmentation of funds for program support. Twice during the past four years the legislature has increased funds for adult farm management programs.

Two criteria were used to measure program growth and expansion: 1) number of programs and FTE instructors and 2) the number of farmers enrolled in management education and other forms of instruction (not including incidental adult instruction that may have occurred as part of secondary programs). Program growth is shown in Table 5.

The decrease in the number of farmers enrolled and the number of instructors during the period of 1981-83 was due primarily to budget constraints and some uncertainties of funding during that period. The number of instructors and farmers has increased significantly in 1984 and 1985. It is anticipated FY 1986-87 will show similar increases in enrollment as a result of reduced tuition and the maturation of programs expanded or began in 1985 and 1986.

TABLE 5. Number of Programs and Personnel Engaged in F.B. Mgt. Education - 1980-86

Year Starting	No. of Schools With Programs	No. Full Time Instructors	No. Part Time Instructors	No. FTE Instructors
1980	92	92	12	98.0
1981	88	87	9	91.5
1982	83	83	8	87.0
1983	81	81	10	86.0
1984	81	83	8	87.3
1985	92	92	14	98.3
1986	104	102	21	114.0

TABLE 6. No. of Farmers Enrolled in Farm Management and Other Management Related Instruction - 1980-86

Year	Farm Mgt.	Other Inst.
1980	4230	8614
1981	4170	7430
1982	4068	7122
1983	3852	6468
1984	3906	6706
1985	4057	6918
1986	4407	7500

As a result of 1985 legislation, farm management education instructors were equipped with computer hardware, trained in the use of FINPAC software and assigned to assist farmers in crises. Some effort was directed at farmers who were members of management education programs, but much of the time and effort was devoted to those in need who were not enrollees. Table 7 shows the effort made in the time period May-December 1985 and December 1985 - September 1986. Almost 7000 farmers were reached by adult farm management instructors during this period.

Table 7. Farm Management Education Instructor Participation In Crisis Prevention/Intervention: Special Activities
Individual Consultations - 1985-86

Individual Consultation	<u>Time Period</u>		Total	<u>Time Period</u>		Total	Grand Total
	May 85 - Dec. 85			Dec 85 - October 86			
	Regular Enrollees	Non Enrollees		Regular Enrollees	Non Enrollees		
Number Associated With Financial Mgmt.	2,119	1,238	3,357	1,716	1,838	3,554	6,911
Hours Spent in Face To Face Consultation	11,340	5,937	17,277	19,400	5,768	25,168	42,445
Non Enrollees assisted VIA telephone	xxxx	499	499	xxxx	586	586	1,085
Number of Computer Programs Run							
FINLRB	1,624	906	2,530	1,720	885	2,605	5,135
FINFLO	254	187	441	1,336	583	1,919	2,360
FINTRAN	74	45	119	152	50	202	321
OTHER	444	131	575	589	72	661	1,236

Assistance was given in three general areas: farm financial management, family stress management and family resource management. Table 8 contains the distribution among these three categories as recorded by instructors.

Table 8. Farm Management Education Instructor Participation In Crisis Prevention/Intervention: Special Activities
Group Sessions: - 1985-86

Focus of Group Activity	Time Period		Total	Time Period		Total	Grand Total
	May 85 - Dec. 85 Regular Enrollees	Non Enrollees		Dec 85 - October 86 Regular Enrollees	Non Enrollees		
Farm Fin. Mgmt.	823	1,205	2,028	1,029	1,102	2,131	4,159
Family Stress Mgmt.	174	233	407	285	438	723	1,130
Family Resource Mgmt.	111	14	125	236	111	347	472

The Farm Crisis Intervention Project initiated much activity relative to financial planning, largely through the introduction of the Compaq computers and FINPACK software. This activity occurred both with farm management enrollees and non-enrollees. As exhibited in the preceding tables, this activity took a variety of forms, both in individual and group instruction. Coping with family stress and management of family resources were also taught in group sessions. In addition to the activities conducted solely through their departments, many farm management instructors participated in cooperative efforts with county FmHA offices, as provided in the Farm Crisis Intervention Project. These activities are documented in tables 9 and 10.

There was no obligation to participate in FmHA office activity during the December 85 - October 1986 period. Participation was voluntary in response to requests from local FmHA offices.

In a significant number of cases, the farm management instructors helped farm families develop approaches to problems. Farm management instructors were expected to assist farm families in developing strategies for dealing with crisis. Table 10 illustrates six categories of strategies that were generally pursued.

TABLE 9. Farm Management Education Instructor Participation In FmHA Office Activity

ITEM	May-Dec 1985	Dec 1985-Oct. 1986	Grand Total
No. of Days	860	94	954
No. of Hours	5,821	618	6,439
Type of Activity			
Guaranteed Loans	170	20	190
Operating Loans	248	56	304
Security Checks	177	2	179
Chattel Appraisals	107	6	113
Analysis of Past Years Records	261	17	278
FINLRBS	533	94	627
Loan Deferrals	170	15	185
Other	130	0	130

TABLE 10. Farm Management Education Instructor Participation In Crisis Prevention/Intervention: Special Activities
Accomplishment: 1985-86

ACCOMPLISHMENT: Developed A Strategy	Time Period		Total	Time Period		Total	Grand Total
	May 85 - Dec. 85			Dec 85 - October 86			
	Regular Enrollees	Non Enrollees		Regular Enrollees	Non Enrollees		
To continue Farming	1,399	659	2,058	1,980	526	2,506	4,564
To Obtain Off Farm Income	333	165	498	423	125	548	1,046
To Discontinue Farming	86	135	221	134	93	227	448
For Family Resource Mgt.	548	268	816	487	123	610	1,426
For Dealing with Stress	375	277	652		153	153	805
Re-entering Farming	1		1	1		1	2

Mediation Activity:

In addition to their regular duties in teaching and assisting farm families with regular financial skills and strategies, many farm management instructors have become involved with mediation, either as a mediator or financial consultant to the farmers in mediation. A summary of mediation activities is listed in Table 11. All participation in mediation is voluntary since it was not mandated by mediation legislation, but grew out of the capabilities established by the crisis legislation which provided computerized planning tools.

TABLE 11. Farm Business Management Instruction Participation In Mandatory Mediation - March - October 1, 1986

Activity	Number
Serve as Financial Analyst	
No of Farmers Served	283
Estimated No. of Hours	3507
Serve as Mediator	
No. of Farmers Served	45
Estimated No. of Hours	373
Ass't. Extension Office in Coordination	
No. of Cases Handled	66
Estimated No. of Hours	345
Other	
No. of Cases	28
Estimated No. of Hours	265

Financial Condition of Farmers in the Farm Management Program.

The financial condition of farmers enrolled in the farm management program is described in the Statewide summary of Selected Items from Farm Operators Financial Statements attached to this report as Appendix D. This summary was taken from the area record analysis summaries for the years 1980-85.

One of the objectives of this study was to make a comparison between the earnings of farm management enrollees and Minnesota farmers in general. Because of some basic differences in determination of earnings between the farm management record analyses and the Minnesota Dept. of Agriculture - USDA statistics, there was some difficulty in finding a common measure. Inventory values are calculated differently in each of the data systems, so the most representative earnings measure is net operating cash (cash income minus operating expense). Consequently, this measure was used in the comparisons found in Table 12. The base year to calculate comparisons was 1981 because of greater uniformity in the USDA data collection from 1981-85.

TABLE 12. Income of Farm Management Enrollees Compared to General Farm Population

Year	Farm Management Net Cash Operating Income	% of 1981	Minnesota Net Cash USDA Figures	% of 1981
1981	25,592	100	16,834	100
1982	24,359	95	17,421	103
1983	33,935	133	19,548	116
1984	23,575	92	15,397	91
1985	28,377	111	22,498	134

The net cash operating income of farm management enrollees moved in the same direction as farmers in general during the years studied. However, the level of net cash earnings of farm management enrollees showed a dollar advantage ranging from \$5879 in 1985 to \$14387 in 1983. Although the percentage change from the base year was lower than the state average in 1981 and 1985, the level of net cash earnings held considerably over the state average.

Comparison of Business Closures-

The Farm Management instructors who were members of the Minnesota Adult Farm Business Management Advisory Committee collected data from official county newspapers for the periods March-April, 1985 and March-April, 1986. The names of farmers having farm auctions or foreclosures were forwarded to the area adult agriculture coordinators who compared those names with their list of farm management enrollees. The percentages of farmers undergoing a business closure were then compared with the percentage of all farms who experienced closures.

Farmers were considered to have been a member of a farm management program if in any year from 1980-1986 they had their farm business analyzed through the Vocational Agriculture farm business analysis system.

Table 13. Auction Sales and Foreclosures of Farm Management Enrollees Compared to Farmers In General.

	Total No. of Farms-Commercial	Number in Mgt. Program	Percent of Total
Total Farms	55,945 ¹	5,539 ²	9.9
Farms Having Auction Sales ³	722	56	7.76
Farms with Foreclosure Notices ⁴	126	9	7.14

Of the commercial farms in Minnesota 9.9 percent were or had been enrolled in farm management education programs. If management education programs had no benefit in helping farmers deal with financial crisis, it would be anticipated that approximately 9.9 percent of the farmers having auctions or being foreclosed upon would also be counted as farm management education program enrollees. That was not the case. Only 7.76 percent of the auction sales and 7.14 percent of the foreclosures were with farmers who were enrolled in farm management education programs at any time during the 1980-1986 period.

Appendix C contains Figures 3 and 4 which show the counties from which the auction/foreclosure data were obtained. The figure showing foreclosures also shows by symbol the kind of credit agency that initiated the foreclosure action.

Farmer and Creditor Perceptions of Farm Management Education Programs.

As described earlier, farmers from 25 farm management education programs were asked to respond to a questionnaire relating to their perceptions of the management education program. A total of 615 farmers responded to all or part of the questions asked. Fifty creditors were asked to respond to a similar query, and forty-four responded. In the tables, which follow, farmers and creditors responding in 1986 are compared to farmers responding in 1979 to determine if the responses appear to be appreciably different. No statistical tests of significant differences were employed.

¹ Based on 1982 Census - Commercial farms based on \$20,000 gross sales

² Estimated number of different farms with analysis 1980-1985

³ Actual auction sales in 25 sample areas March-April, 1985, and March

⁴ Actual foreclosure notices published in 25 sample areas March-April,

Table 14. Contributions to the Family from Participation in the Adult Farm Management Program, Ranked in Order of Importance

Family Contribution	Richardson Study 1979: Farmers by Years of Enrollment				1986 Study Farmers Creditors	
	1-3 (n=58)	4-6 (n=50)	>6 (n=113)	Total (n=221)	(n=615)	(n=44)
Increased Earnings	3	3	2	2	3	2
Less Workload	9	9	9	9	9	9
Improved Outlook on Farm Business Opportunities	5	6	7	6	5	8
Improved Management Skills	1	1	1	1	1	1
Better Knowledge of the Capabilities of Yourself and Your Business	2	2	3	3	2	3
Exchange of Ideas, Skills, and Techniques Gained Through Class Discussion, Tours and Instructor's Visits	7	7	6	7	6	5
Community Social Aspects Gained Through Attendance at Banquets, Tours and Class Meetings	10	10	10	10	10	10
Development of Greater Confidence in Actions Taken and a Feeling that Greater Goals can be Accomplished	6	4	5	5	7	6
Considering the Farm Operation More as a Business than a Way of Life	8	8	8	8	8	4
A Feeling of Greater Security in the Business Decisions Made	4	5	4	4	4	7

Respondents were asked first to rank in order of importance, 10 benefits they might have received as a participant in the farm management education program. Rankings with comparisons are shown in Table 14.

The ranking of the 10 contributions by farmers survey in 1986 is almost identical to the ranking of farmers in 1-3 years of enrollment in 1979, differing only in items ranked 6th and 7th place. The degree of agreement is extraordinary. When compared to creditors, farmers place the same three items in the top three ranks (although in slightly different order) and the same two items in the bottom ranks as do creditors. Again, the degree of agreement is extraordinary. Except for some minor variations in the middle of the rankings where perceived differences may be small, farmer surveyed in 1986, farmers surveyed in 1979 and creditors surveyed in 1986 assign essentially the same rank order of importance to 10 selected contributions farm management education programs make to farm families.

Instructional Methodology.

Farmers and creditors were also queried about the kind of instruction they perceived to be of most benefit. To provide some measure of stability of farmer perception, the seven alternatives used by Richardson were used. However, two primary instructional methods have been used much more frequently since 1979 and were added to the list: individual instruction using the computer, and regular access to the instructor via telephone.

Table 15 shows how farmers and creditors responded to the question on preferred methodology. With the two items added to the Richardson list, the ranks are not directly comparable, but still provide information that suggests some changes in farmer emphasis. Note that the individual farm visit to the farm still ranks number one. It is followed by the other forms of individualized instruction: individual computer assistance with planning and management and with telephone contact.

Table 15. Type of Instruction From Which Respondents Perceived They Received the Most Benefit

Type of Instruction	Rank of Importance				
	Richardson Study: Farmers by Years of Enrollment: 1979			1986 Study	
	1-3 (n=58)	4-6 (n=51)	>6 (n=114)	Farmers (n=615)	Creditors (n=44)
Classroom Meetings	3	2	3	4	4
Farm Tours with Prepared Material	4	4	4	9	8
Farm Tours in Small Groups with Impromptu Questions and Answers	2	3	2	6	5
Individual Farm Visits to Your Farm by Instructor on Scheduled Basis	1	1	1	1	1
Newspaper Articles of Local Concern	7	7	7	7	9
Monthly Farm Management Newsletter	6	6	6	5	6
Farm Demonstration Plots	5	5	5	8	7
Individual Inst. Using Computer to do Long Range Budgeting, Cash Flow Planning and General Fin. Mgt.	NA	NA	NA	2	2
Regular Access to Consultation by The Instructor Via Telephone	NA	NA	NA	3	3

Group sessions (classroom meetings) is next in order of preference by both farmers and creditors in 1986. Such activities as farm tours with prepared materials, farm demonstration plots and newspaper articles were on the bottom of the list of both groups surveyed in 1986. It appears that monthly newsletters have taken on greater importance for a number of farmers with this item ranking higher than any of the other media based alternatives.

It is likely that farmers respond to the kind of instructional methodology where the instructor shows the most expertise. In general, farmers and others place priority on individualized instruction of all kinds, classroom instruction and then on techniques where the instructor may have shown particular skills in providing education and guidance.

Program Objectives.

With the major economic and structural adjustments in agriculture during the 1980s, there was some question about how farmers viewed the objectives of the Farm Management Education program.

Table 16 shows that there is absolute agreement among the farmers surveyed in 1986 and those surveyed in 1979 as to the priority order of the objectives of the farm management program. Likewise, creditors gave almost an identical response. It is vital to recognize that the objectives of the program in the eyes of the user have not changed. It would appear that no change in the direction of management education programs should be considered at this time.

Farm Management Program Activities.

Farm management instructors frequently wonder if they are doing the right things! The previous discussion of objectives illustrates that the farmers are in clear agreement as to the rank order of importance of the various objectives. But how do they feel about the specific activities? To gain some perception of how farmers and creditors viewed the instructor's role, they were asked to respond to twenty-nine statements to indicate: 1) If they thought this activity was part of the farm management program and 2) Did they think the activity should be part of the management program. The responses are reported in percentages, that is a 95 means that 95 percent of the respondents thought the activity was (or should be) part of the program of instruction.

Table 16. Adult Farm Management Program Objectives Ranked in Order of Priority by Farmers and Creditors

Program Objectives	1979 Richardson Study Years of Enrollment			1986 Respondents	
	1-3 (n=57)	4-6 (n=54)	>6 (n=118)	Farmers (n=615)	Creditors (44)
Assistance in Setting Goals and Planning	4	4	4	4	4
Assistance in Keeping Complete and Accurate Farm Records Including Inventories	1	1	1	1	1
Assistance in Interpreting and Analyzing Farm Records	2	2	2	2	3
Technical Assistance Relative to Crops, Livestock, Buildings and Equipment	5	5	5	5	6
Assistance in Planning, Implementing and Evaluating Changes in the Farm Business for more Efficient and Profitable Use of Resources	3	3	3	3	2
Improved Family and Community Life through Development and Application of Sound Management Decisions and Practices	6	6	6	6	5

Table 17 Perceptions of Present and Desired Activities That Are or Should be Part of the Farm Management Program of Instruction

	Farmer Responses		Creditor Responses
	Is Part of Program %	Should be Part of Program %	Is Part of program %
Assistance in keeping Accurate Farm Records	95	97	100
Interpretation of Your Farm Operation Analyses Report	94	97	96
Assistance with Crop Planning and Soil Mgt.	65	80*	86+
Livestock Feeding and Ration Improvement	44	60*	68+
Farm Business Credit Planning	65	79	61
Assistance With Cash- Flow Projections	80	88	96+
Aiding with Building and Machine Purchases	49	64*	52
Assisting with Building and Farmstead Layout	37	53*	27
Income Tax Mgt. and Planning	87	92	77
Income Tax Preparation and Filing	52	66	48
Assistance with Estate Planning	36	59*	32
Creating an Understanding of the Farm Product Marketing Options Avail.	58	77*	68
Assistance with Livestock Health	24	41*	46*
Aiding in the Improvement of Quality of Livestock Production	38	50	71*

Table 17 (continued)

Livestock Breeding and Genetics	21	33	57+
Crop and Herbicide Demonstration Plot	54	66	57
Assistance with the Understanding of Farm Machine Repair & Main.	13	38*	23
Development of Mech. Skills, such as Welding and Electrical Wiring	14	40*	14
Assistance with Knowledge of Crop Harvesting and Handling Alternatives	40	57*	66+
Assisting with Suggestions for Farm Building Repair and Modification	27	47*	43+
Assisting in Establishing Family and Business Goals	68	77	82
Assistance with Farm Transfer and Operating Agreements	49	65*	39
Assistance in Interpreting Gov't. Farm Program Regulation	75	86	84
Coping with Family Problems Involving Mental Stress and Pressure	25	47*	19
Assistance with Understanding the Legal and Tax Aspects of Foreclosures, Bankruptcy and Other Financial Crisis Situations.	42	61*	17+
Assistance with Communication Among and Between Family Members Regarding the Operation and Management of the Business.	37	52*	26
Assistance with Planning Personal Expenditures and Budgeting	44	54	31

Table 17 (continued)

Assistance with Organizing and Managing the Farm Office Including Computer and Software Selection	43	62*	25+
Provides an Unbiased Impartial Perspective of the Farm Business	70	77	31+

* Expectation is 15 percent or more greater than the current assessment

Table 17 shows how farmers and creditors responded. It is obvious that there is a great deal of variation in the specific activities among various programs. Almost without fail, farmers reported help with keeping records and interpretation of the analysis report as both a present and desired activity. Next in order of accomplishment were the planning activities - both those that dealt with the financial management of the business and those that involved enterprise planning. Technical knowledge and assistance was the lowest on the list of both activities accomplished and desired. It should be noted, however, that the greatest discrepancies existed between what is and what should be on the technical items. For example only 13 percent of the farmers reported that the instruction provided "assistance with the understanding of farm machine repair and maintenance" while 38 percent, or one-quarter more of those surveyed thought this activity should be part of the program. To help spot these discrepancies more easily, each item where the expectation is 15 percent or more greater than the current assessment is marked with an * asterisk.

The symbol (+) marks responses of creditors if they deviated from farmer responses by 15 percent or more. It is of value to note that creditors often perceive the farm management program to be more highly oriented to technology transfer than do farmers. They also significantly underrate the role the managerial program plays in things such as computer advice and assistance with bankruptcy. It may be of value to note that creditors do not rate the "unbiased, impartial, perspective of the farm business" the same way farmers do. Creditors are cautious in suggesting that the perspective given to farmers by the management programs and their instructors is impartial. Since this question was not asked in the 1979 survey, it is not possible to determine if the farm crisis has had an impact on how creditors view the impartiality of the management program.

Narrative Responses.

To allow both creditors and farmers to express their own views, they were asked to respond to two open ended questions requesting their opinions.

Farmers were asked "In your own words, list two reasons why you decided to enroll in a farm management education program." Of the 615 questionnaires received, 588 persons gave one or more responses to the question. Researchers read each response and categorized them into categories of similar content. The responses were categorized into the 18 items shown in table 18.

Table 18. Response to the Question "In Your Own Words List Two Reasons Why You Decided to Enroll in a Farm Management Education Program." 588 of 615 farmers responding

General Category of Reply	Frequency
Record Assistance(Including depreciation)	251
*Correct, Accessible Source of Valid Information	123
Availability of Record Analysis & Interpretation	96
Individual Instruction	68
Development of General Management Skills	60
Tax Planning & Preparation	47
Encouragement and/or Requirement from Other Individuals or Agencies (Farm Security, Creditors, Co.Agent, Dad, VoAg)	45
Gain General Farming Knowledge	42
Assistance in Financial Planning	39
Gain Knowledge & Control of Own Business	33
Decision-Making Assistance	27
Comparison with Other Farms	20
Desire to Increase Earnings	15
Assistance in Obtaining or Maintaining Credit	10
Share Ideas	10
Assistance w/transfer or establishment	9
Began with Veteran's Program	3
Other (decrease work load, lower cost, etc.)	3

* Includes: General info-9, Crop Mgt. 25, Livestock Mgt. 15, Marketing 8, Government Programs 9.

While there are many reasons for enrollment listed, it is interesting to note that "Desire to increase earnings" was not a high priority reason. It was listed by only 15 farmers or 2.5 percent of the respondents as a reason for enrolling.

Some typical responses were:

Allows clients to see where they have been, where they are now, and where they are going in terms of farm financial management.

Improve farm management skills, especially through sharing practical ideas with instructors and fellow farmers.

Develop record keeping system that will enable them to analyze their business and adapt to current conditions.

Improve profitability by using the information provided by the management reports.

Farming is a business and business decisions must be made with accuracy. Farm management offers the tools needed in the sound decision making process.

Today's economy places an emphasis on finding and using various tools for management. Farm management offers the access to these tools with assistance in using the tools to their fullest extent.

A second query asked about what farmers liked most about the management program. Table 19 shows the categorized responses to the question "In your own words list the two things you like best about the farm management education program."

Table 19. "In Your Own Words, List The Two Things You Like Best About The Farm Management Education Program." 573 out of 615 responding.

General Category of Reply	Frequency
Quality and Availability of Individual Instruction	216
An Easy, Accurate, and Thorough Record System (Includes 12 replies listing computer tools)	127
Availability and Interpretation of Record Analysis	117
*A Source of Current, Reliable Information	105
Tax Management Assistance	57
Aid in Goal Setting & Financial Planning	42
Comparison With Other Farms	40
Computer & Software Availability and Assistance	30
Liked the Program in General	25
Decision-Making Assistance	23
Sharing of Ideas	21
Classes and Group Sessions	16
Ability to Develop Managerial Skills	15
Knowledge & Control of Business	15
Tours and Demonstration Plots	12
Gives Confidence & Support to Decisions	11
Credit Assistance	7
Lower Cost	7
Assistance with Transfer or Establishment	5
Farm Management Newsletter	2
Negative Response	1
* Includes (crop 25, livestock 6, general 45, marketing 19, government programs 10)	

The responses closely parallel the responses to the question on program benefits reported in Table 14. Only one farmer gave a negative response. Some of the typical responses were:

Instructor helps customer with questions regarding changes in farming operations either taking place or needed.

The availability of individualized instruction by a highly qualified instructor at the local level.

Goal setting and progress reports.

The advisors and their capabilities to have their enrollees present me with accurate farm records, production and costs.

Our program offers so much, marketing skills, production, cost analysis, budgeting, etc. Growth potential is strived for and most of the time reached.

Creditors were asked similar questions. Table 20 lists the responses to the question about reasons for joining the farm management program. All of the creditors responded.

Table 20. Response to the Question: "In Your Own Words, List Two Reasons Why You Think Your Farmer Clients Should Decide to Enroll in a Farm Management Education Program:" Number of Responses = 44

Response Category	Number of Responses
Decision Making Tools & Assistance (Including Cash Flow Assistance)	13
Development of Record Keeping Skills	10
Provide Tools & Assistance To Develop Management Ability Including Analysis	10
Better Knowledge of Own Operation	9
Access to Current Technology	5
Marketing Skills	4
Goals and Personal Development	3
Other Generally Positive Statements	1

Creditors emphasized record keeping, decision making, developing managerial ability, and better knowledge of the operation as the primary reasons for farmers to join. Some typical responses were:

To help understand where I am at in my farm business at the end of the year.

To get a better handle on costs of production for individual enterprises.

Assist in improving profitability of operations.

To learn better marketing skills.

To get better business information in setting future goals for farm business growth.

Creditors were also asked how they liked the farm management program in their community. Table 21 shows how creditors expressed their views of the farm management program.

Table 21. Creditors Response to the Question: "In Your Own Words, List Two of the Things You Like Best About the Farm Management Education Program in Your Community Creditors."

Response Category	Number of Responses
Decision-Making Help - Records, Cash Flows, Etc.	15
Access to a Qualified Instructor	14
Analysis & Comparisons	13
Contributes to Farmers Success, & Personal Development, Goals	7
Marketing & Technical Knowledge	3
Generally Positive Statements Regarding Program	3
Help Farmers in Trouble Including Gov't. Programs	2

Creditor responses were not unlike those of farmers, concentrating on the high priority activities that involved instructor/farmer relationships and the information that could be gained from a systematic study of the farm business. Some typical responses were:

The availability of the instructor for any help and questions we might have.

The financial planning, analysis and consultation.

Analysis of yearly records as compared to other cooperators.

Having good and organized records from which to make decisions.

The confidential and unbiased perspective of the instructor helps keep the business on an even keel. Instructor is invaluable!

Monetary Gains From Farm Management.

Table 8 illustrated that farmers did not place increasing earnings as the high priority reason for joining a management education program, although it could be argued that increasing earnings would be the ultimate outcome of many activities to which farmers did ascribe a high priority.

In the introduction to this paper several studies were cited in which economic return was the primary focus of the study. A true testing of economic return in a benefit-cost analysis was beyond the scope of this study in both time and resources. But Richardson in 1979 tested the farmer's perceptions of what the dollar benefits of the program were by asking a simple question about their perception of earnings attributable to farm management instruction. Both farmers and creditors were asked the same question. To determine if perceptions today are different than perceptions of 1979, Table 22 shows how farmers and creditors in 1986 responded compared to farmers in 1979. The specific question asked of farmers was "Everyone recognizes that the income from farming is not as good as it could be, but given these conditions, how much of your annual income do you attribute to your participation in the farm management education program? How many more or less dollars in Net Income did you feel you earned each year than other farmers like you who were not in the farm management education program?" Creditors were asked about their perceptions of farmers who enrolled versus those who were not with basically an identical question. The results of those questions are shown in Table 22.

Table 22. Perceptions of Farmers and Creditors of The Annual Monetary Benefit of Farm Management Education Participation.

Degree of Increase or Decrease in Average Annual Income	Richardson - 1979*			1986 Farmers	1986 Creditors
	1-3 (n=22)	4-6 (n=33)	>6 (n=53)	(n=317)	(n=20)
Least	0	0	0	0	1,000
Most	10,000	10,000	15,000	50,000	12,000
Average	3,473	3,073	4,962	4,381	4,900
Median	NA	NA	NA	3,000	5,000
Mode	NA	NA	NA	5,000	5,000
95% confidence interval around the mean			3799-4983	3688-6111	
*Weighted average - all groups combined = \$4081					

The 1986 sample of respondents is much larger than the 1979 sample reported by Richardson so it would be expected that the range of responses (differences between high and low) would be greater. There has also been an increase in general farm size during this intervening period. The increase in weighted average from \$4081 in 1979 to the average \$4381 in 1986 is likely tied to both increases in farm size and increases in the general productivity level of farm business, even in periods of unfavorable economic conditions. The stability of the estimates among and between groups is rather surprising given the economic crisis conditions for many farm families. The fact that their estimates of benefit are still sizable perhaps relates to their ability to cope better with crisis, and the fact that the sample group represents students from well established, stable farm management education programs.

Farmer and Creditor Recommendations.

Another measure of satisfaction is if the current enrollees would recommend that their friends and neighbors also enroll. To test the strength of their recommendations, they were asked to respond on an 11 point scale (0-10) if they would encourage their neighbors to enroll.

Table 23. Degree of Encouraging Neighbors to Enroll in Farm Management Education Programs.

Scale		No. Reporting Farmers (n=598)	No. Reporting Creditors (n=43)
Strongly Discourage	0	1	0
	1	3	0
	2	2	0
	3	1	0
	4	3	0
	5	41	2
	6	18	2
	7	52	1
Strongly Encourage	8	126	9
	9	94	12
	10	257	17
Mean =		8.6	8.8

The mean response from both farmers and creditors was very similar. It should be noted, however that a small minority (10 of 598 or 1.7%) of the farmers would discourage their neighbors from joining. No attempt was made to identify why they would discourage them. None of the creditors would discourage farmers from enrolling, but some (2 Of 43) took a neutral stance and would neither encourage nor discourage. A more sizeable number of farmers were also neutral, with 41 of 598 or 6.8 percent neither encouraging or discouraging their neighbors.

The conclusions and implications of these findings are discussed in the next chapter.

SUMMARY AND CONCLUSIONS:

This study of impact represents a major at-risk examination of the farm management education program at a time when all public programs are subject to careful scrutiny. It was guided by the need to know if the changes in economic climate and structure had altered in an appreciable way the perceptions participants have of the management education program. While there had been previous evidence of the "process" of crisis intervention in an ailing agriculture there was little except conjecture about the real impact that the processes had had on those the programs of management instructions and crisis intervention had touched.

There was need also to examine purpose and content. The objectives for farm management education, established in the last 1960's, had not been verified since 1979 to determine if they were in fact the objectives thought by farmers to be important. Along with objectives was a need to re-examine activity: Are programs doing the right things?

This study represents data from a wide variety of sources. Each piece was selected to answer a specific question or group of questions. The primary data sources were as follows:

1. Census and survey records from the State Department of Agriculture.
2. Summaries of farm business records from the six analysis regions for the years 1978-1985.
3. Archive records from the regional farm management analysis centers for the period 1980-1986.
4. Archive records from selected official county newspapers for the period March 1 - April 30, 1985 and March 1-April 30, 1986.
5. Archive records from selected county newspapers or advertising supplements for the same period listed in item 4.
6. Questionnaires from 615 farm families enrolled in 25 different farm management programs.
7. Questionnaires from 44 farm credit managers selected from the same cities or towns from which farmer questionnaire information was obtained.
8. Records from the agricultural section of the State Board of Vocational And Technical Education.

Conclusions:

1. The vast majority of farms in the farm management program are single family businesses represented on the average by 1.3 males and 1.0 female.
2. The average age of men and women enrolled in well established farm management education programs is 38.9 years and ranges from 17 to 81 years of age.
3. Both males and females are generally high school graduates, but females have slightly more formal education than males

- (13.1 vs. 12.8 years)
4. About 1/2 of the females and 3/4 of the males have had some high school vocational agriculture, but males have had more instruction than females. (2.42 years for males and .6 years for females)
 5. Some farms were totally owned by the enrollees. Some were totally rented. Most were a combination with an average total farm size of 516 acres.
 6. Farms in the management education program are highly diverse. Farmers classified their farms into 25 different types of farms. The largest single enterprise farms were classified as dairy, hog or cash crop farms.
 7. Many farm management families are on farms that have been in the family for some time. Over 400 of the farmers reported that at least a part of the farm had been in the family for two generations or more.
 8. All or part of the farm being operated by 77 of the 475 families responding were acquired in the 19th century with some dating back before the civil war.
 9. The infusion of new State dollars into management education programs has allowed them to regain their scope in the number of programs and personnel. The 1986 FTE count of 114 compares to the 1983 low for the decade of 86 FTE.
 10. The number of farmers enrolled in farm management and other instruction closely parallels the number of instructors. In 1986 there were 4407 farm management enrollees and 7500 enrollees in other adult agriculture programs.
 11. The engagement of Farm Management instructors in all forms of crisis intervention - FINPACK, Mediation, FmHA activities has been outstanding. Twenty-six person years of assistance has been given from May, 1985 to September, 1986. Almost 7000 farmers were aided during this period using the computer hardware and software provided by special legislative action.
 12. Adult management instructors contributed 3.2 person years of skilled assistance to FmHA offices and 1.75 person years to the mediation process.
 13. The net cash income of farm management enrollees moved in the same direction as Minnesota farms in general during the 5 year period studied, but in absolute dollars, farm management enrollees generally showed higher net cash incomes than farmers in general.
 14. About 10 percent (9.9) of the commercial farms in Minnesota have been enrolled in farm management education programs at one time or another since 1980.
 15. Farmers who are members of management education programs sold their farm at auction or were subject to foreclosure at a lower rate than were farms in general during the crisis periods including March - April 1985 and March - April 1986.
 16. Farmer perceptions of the contributions of the farm management program to them have not changed appreciably since a similar group was surveyed in 1979 prior to the farm economic crisis. Farmers still rank improved management skills, better knowledge of personal capabilities and increased earnings as the three most important contributions

- of the management program.
17. Individualized instruction ranks highest among the type of instruction from which farmers perceive they receive benefit.
 18. The objectives conceived in the late 1960s and ranked by farmers in 1979, have exactly the same ranking in 1986. Assistance in keeping records and in analyzing and interpreting the records are the two ranked highest by farm families.
 19. Farmers generally agree that activities associated with planning and record keeping are and should be part of the management program. Technology transfer instruction and activity is lower on the list of what enrollees now get from their management program. Some of the biggest discrepancies between the activities that now occur and those that should occur are in the technology area, but even then what farmers perceive should occur in these areas is perceived as less important than the planning activity.
 20. Farmers generally join management programs to improve management skills and those activities associated with being a good manager. Increased earnings is not a strong motivator by itself for program membership. Creditors gave similar responses.
 21. Farmers listed individual instruction, the simple record system and assistance with analysis interpretation as their top responses when asked what they liked about the program.
 22. Farmers perceive the gain in income to be about \$4300 per year; approximately the same as reported in 1979.
 23. Only a few farmers would not recommend the management education program to their neighbors (less than 2 percent) although a larger number (6.8 percent) were neutral. Some of the lack of enthusiasm may spring from the fact that some of the farmers were forced to enroll by creditors and others rather than enrolling voluntarily.
 24. Creditors were strongly supportive of the farm management program with 41 of 43 indicating they would encourage farmers to enroll.

Recommendations:

Almost without exception the responses to this study show a positive impact from farm management education programs. Because there are no areas of the program that appear to be contrary to need from the standpoint of farmers and creditors, we must be careful not to fix things that aren't broken. But we should take heed from this study to consider the following recommendations. They are not necessarily in the order of importance.

1. Many areas of the state still do not have access to management education programs. Since this study of impact is so positive it is logical that steps be enacted to insure that every farm operator has access to farm management education. In sparsely populated areas, this education may need to take a different form taking advantage of the new modern technologies for program delivery.

2. All forms of individualized instruction get high marks from farmers. In areas where farms are sparse, some allowances may need to be made in program rules to compensate for enrollment density so instructors can deliver the form of instruction thought by farmers to be most valuable.
3. Beginning instructors need to be carefully schooled in what the clients consider as important activities and objectives. As programs expand, there must be continued attention to pre-service and in-service education so teachers are skilled in the expected tasks. It is obvious from the attention that farmers give to individual instruction, that the relationship with the teacher is important. Training on how to deal effectively in a one-to-one instructional/counseling role should be high on the list of teacher training activity.
4. The expectations by farmers of teachers is high. To help build and preserve quality, teaching materials for management instruction should be kept up to date and revised on a regular basis. Some funds should be set aside for this activity on an annual basis.
5. Part of the incentive for this study was to determine if legislative augmentation of farm management programs had an impact during crisis. It is clear that it did. The legislative body should be made aware of the impact and be encouraged to continue strong program support not to necessarily deal with the current crisis, but to prevent the advent of a new crisis in years to come.

Others may suggest new and different recommendations based upon their interpretation of the data presented in this study. The authors are grateful for the assistance they have received and welcome critique and review from others.

APPENDICES

Appendix A.

Table A-1. Profile: Age of Men and Women on Farms Enrolled in Farm Business Management Education Programs, 1986

Age Category	Men		Women		Total
	n=794	%	n=618	%	
<25	106	.13	51	.08	157
26-35	257	.32	222	.35	479
36-45	204	.25	182	.29	386
46-55	133	.16	106	.17	239
56-65	74	.09	53	.08	127
>66	20	.02	4	.00	24

Table A-2. Profile: Education Level: Men and Women on Farms Enrolled in Farm Management Education Programs, 1986

Level of Education Years	Number Reporting			
	Men		Women	
	n=742	%	n=550	%
Less than 8	6	9.2	0	3.6
8	30		7	
9 - 11	32		13	
12	388	52.3	304	55.3
13 - 14	164	38.5	114	41.1
15 - 16	110		95	
>16	12		17	

Table A-3. Profile: Farm Size: Number Reporting Owned or Rented Land by Size Category

Size Category	No Reporting Owned Land ¹ n=517	No. Reporting Rented Land ¹ n=500
<hr/>		
<20	15	18
21-160	140	138
161-320	194	133
321-480	83	77
481-640	31	42
641-1000	34	65
1001-1500	13	19
1501-2000	7	6
>2000	0	2

¹Of the 615 farms reporting, only 517 supplied information on the acres owned 500 on the acres rented.

Table A-4. Profile: Years of Enrollment in the Farm Management Education Program.

Years Enrolled	No. of Farmers Reporting
<hr/>	
1	41
2	42
3	42
4	44
5	40
6	42
7-10	135
11-14	115
15-18	54
18-21	35
>21	17

Project Impact

Perceptions of the Farm Management
Education Program - Ag Professionals

You have an opportunity to work with and counsel a number of farmers who are members of the farm management education program in your high school or through the AVTI. We are trying to gain a perception of how professionals who work with farmers view the benefits and activities of the farm management education programs. To help us determine what that perception is, we are asking that you complete this brief questionnaire. Note that there is no place for your name nor any place to identify your city or town. That is deliberate. We want to be able to examine your responses without attribution.

1. Listed below are 10 benefits farmers may have received as a result of participation in the farm management education program. Please rank them in the order you think most important to them. Rank the most important benefit 1, the second most important 2, etc. Rank all 10 items.

<u>Potential Benefits</u>	<u>Rank Order of Importance</u>
Increased Earnings.....	_____
Less Workload.....	_____
Improved Outlook on Farm Business Opportunities.....	_____
Improved Management Skills.....	_____
Better knowledge of the Capabilities of Farmer and his/her Business.....	_____
Exchange of Ideas, Skills, and Techniques Gained Through Class Discussion, Tours, and Instructor's Visits.....	_____
Community Social Aspects Gained Through Attendance at Banquets, Tours, and Class Meetings.....	_____
Development of Greater Confidence in Actions Taken and a Feeling that Greater Goals can be Accomplished.....	_____
Considering the Farm Operation More as a Business than a Way of Life.....	_____
A Feeling of Greater Security in the Business Decisions Made.....	_____

2. Listed below are 9 different types of instruction from which farmers may have benefited. Rank order the top 5 types of instruction by assigning 1 to the instruction from which you think farmers may have benefited the most, 2 the second most important, etc. Rank only the top 5.

<u>Type of Instruction</u>	<u>Rank Order</u>
Classroom Meetings.....	_____
Farm Tours With Prepared Materials.....	_____
Farm Tours in Small Groups with Impromptu Questions and answers.....	_____
Individual Instruction by the Instructor on a Scheduled Basis....	_____
Newspaper Articles and Columns Prepared by the Instructor.....	_____
Monthly Farm Management Newsletter.....	_____
Farm Demonstration Plots.....	_____
Individual Instruction Using the Computer to do Long Range Budgeting, Cash Flow Planning and General Financial Management...	_____
Regular access to consultation by the instructor via telephone...	_____

3. Listed below are 6 commonly accepted objectives of farm management education. Rank order them ranking the objective you think should have first priority 1, second 2, etc.

<u>Program Objectives</u>	<u>Rank Order</u>
Assistance in Setting Goals and Planning.....	_____
Assistance in Keeping Complete and Accurate Farm Records Including Inventories.....	_____
Assistance in Interpreting and Analyzing Farm Records.....	_____
Technical Assistance Relative to Crops, Livestock, Buildings and Equipment.....	_____
Assistance in Planning, Implementing and Evaluating Changes in the Farm Business for more Efficient and Profitable Use of Resources.....	_____
Improved Family and Community Life through Development and Application of Sound Management Decisions and Practices.....	_____

4. Listed below are 21 activities or benefits that others have told us have been part of management education programs. Check those activities or benefits you think have been part of the management education programs available in your town, and those you think should be part of the management program.

Program Benefits or Activities

Check here if you think this activity or benefit is part of the Mgt. Educ. Program in your community.

Check here if you think this activity should be part of the Mgt. Educ. program in your community.

Assistance in Keeping Accurate Farm Records	_____	_____
Interpretation of Farm Operation Analysis Report	_____	_____
Assistance with Crop Planning and Soil Management	_____	_____
Livestock Feeding and Ration Improvement	_____	_____
Farm Business Credit Planning	_____	_____
Assistance with Cash-Flow Projections	_____	_____
Aiding with Building and Machine Purchases	_____	_____
Assisting with Building and Farmstead Layout	_____	_____
Income Tax Mgt. and Planning	_____	_____
Income Tax Preparation and Filing	_____	_____
Assistance with Estate Planning	_____	_____
Creating an Understanding of the Farm Product Marketing Options Avail.	_____	_____
Assistance with Livestock Health	_____	_____
Aiding in the Improvement of Quality of Livestock Production	_____	_____
Livestock Breeding and Genetics	_____	_____
Crop and Herbicide Demonstration Plot	_____	_____
Assistance with the Understandings of Farm Machine Repair and Main.	_____	_____
Development of Mech. Skills, such as Welding and Electrical Wiring	_____	_____
Assistance with Knowledge of Crop Harvesting and Handling Alternatives	_____	_____
Assisting with Suggestions for Farm Building Repair and Modification	_____	_____
Assisting in Establishing Family and Business Goals	_____	_____
Assistance with farm transfer and operating agreements	_____	_____
Assistance in interpreting gov't. farm program regulation	_____	_____
Coping with family problems involving mental stress and pressure	_____	_____

Assistance with understanding the legal and tax aspects of foreclosures, bankruptcy and other financial crisis situations.

Assistance with communication among and between family members regarding the operation and management of the business.

Assistance with planning personal expenditures and budgeting

Assistance with organizing and managing the farm office including computer and software selection.

Provides an unbiased impartial perspective of the farm business

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

5. In your own words, list two reasons why you think your farmer clients should decide to enroll in a farm management education program.

1. _____

2. _____

6. In your own words, list two of the things you like best about the farm management education program in your community.

1. _____

2. _____

7. Everyone recognizes that the income from farming is not as good as it could be, but given these conditions, how much of the annual income of farmers enrolled in farm management programs do you attribute to participation in the farm management education program? How many more or less dollars in net income did you feel they earned each year than other farmers like them who were not in the farm management education program? \$ _____

8. If you were visiting with your farmer clients about the farm management education program, what would you recommend to them? On a scale of 0 to 10 mark where you think your response would best fit. Circle your response.

0	1	2	3	4	5	6	7	8	9	10
Strongly					Neither					Strongly
<u>Discourage</u>					Discourage					<u>Encourage</u>
them from					nor					them to
Enrolling					Encourage					Enroll

Project Impact 10/07/86

Perceptions of the Farm Management Education Program

If you have more than 1 member in this farm business, you may prefer to confer with the other adults. The purpose of this inquiry is to determine your perceptions of the value of the Farm Management Education program to you and your farm business.

Your instructor will not see your responses unless you choose to show them to him before returning the questionnaire to us for summary. When you have completed the questionnaire, please place it in the attached envelope, seal it, affix a stamp and mail it or give it to your instructor. He will in turn send all he has collected to us for summarization. Thank you for your help.

1. How many adult family members are part of your farm business? (For example, husband and wife and adult son would be 3; husband and wife and brother and wife, all in the same business, would be 4).

Total Number _____ (Males _____ Females _____)

2. Complete one column for each person you counted in question #1.

	Females				Males			
Age of each person counted in question 1.	1	2	3	4	1	2	3	4
	----	----	----	----	----	----	----	----
Mark an x for the person completing the questionnaire	----	----	----	----	----	----	----	----
Number of years of formal school completed	----	----	----	----	----	----	----	----
Number of years of H.S. vo-ag completed	----	----	----	----	----	----	----	----
Number of years of full time post secondary or college education completed with a major emphasis in agriculture	----	----	----	----	----	----	----	----

3. How many years have you been a member of the Farm Management Education program? _____ years

4. How many total acres did you have in your farm business in 1986? owned _____ rented _____
(Count all acres, even those in woods, waste, farmstead, etc.)

5. How many tillable acres did you have in your farm business in 1986 owned tillable _____ rented tillable _____ (Count all tillable acres, even if they were in pasture crops).

6. Which of the following do you think best describes your farm? Check all that apply but no more than 3.

Dairy farm	_____	If more than three apply, check here <u>only</u> _____ Diversified Farm
Hog farm	_____	
Beef farm	_____	
Sheep farm	_____	
Other Livestock Farm	_____	
Cash Crop Farm	_____	
Vegetable/Fruit Farm	_____	

7. How many generations of your family have farmed the land you now farm?
 _____ In what year did members of your family first acquire the farm or
 part of the farm your family has held for the longest period of time? _____

In the questions which follow, please record your perceptions of the farm management education program.

8. Listed below are 10 benefits you may have received as a result of your participation in the farm management education program. Please rank them in order of importance to you. Rank the most important benefit 1, the second most important 2, etc. Rank all 10 items.

<u>Potential Benefits</u>	<u>Rank Order of Importance</u>
Increased Earnings.....	_____
Less Workload.....	_____
Improved Outlook on Farm	
Business Opportunities.....	_____
Improved Management Skills.....	_____
Better Knowledge of the Capabilities	
of Yourself and Your Business.....	_____
Exchange of Ideas, Skills, and Techniques	
Gained Through Class Discussion, Tours,	
and Instructor's Visits.....	_____
Community Social Aspects Gained	
Through Attendance at Banquets,	
Tours, and Class Meetings.....	_____
Development of Greater Confidence in	
Actions Taken and a Feeling that	
Greater Goals can be Accomplished.....	_____
Considering the Farm Operation More	
as a Business than a Way of Life.....	_____
A Feeling of Greater Security in the	
Business Decisions Made.....	_____

9. Listed below are 9 different types of instruction from which you may have benefited. Rank order the top 5 types of instruction by assigning 1 to the instruction from which you benefited the most, 2 the second most important, etc. Rank only the top 5.

<u>Type of Instruction</u>	<u>Rank Order</u>
Classroom Meetings.....	-----
Farm Tours With Prepared Materials.....	-----
Farm Tours in Small Groups with Impromptu Questions and Answers.....	-----
Individual Instruction by the Instructor on a Scheduled Basis...	-----
Newspaper Articles and Columns Prepared by the Instructor.....	-----
Monthly Farm Management Newsletter.....	-----
Farm Demonstration Plots.....	-----
Individual Instruction Using the Computer to do Long Range Budgeting, Cash Flow Planning and General Financial Management..	-----
Regular access to consultation by the instructor via telephone..	-----

10. Listed below are 6 commonly accepted objectives of farm management education. Rank order them ranking your first priority 1, second 2, etc.

<u>Program Objectives</u>	<u>Rank Order</u>
Assistance in Setting Goals and Planning.....	-----
Assistance in Keeping Complete and Accurate Farm Records Including Inventories.....	-----
Assistance in Interpreting and Analyzing Farm Records.....	-----
Technical Assistance Relative to Crops, Livestock, Buildings and Equipment.....	-----
Assistance in Planning, Implementing and Evaluating Changes in the Farm Business for more Efficient and Profitable Use of Resources.....	-----
Improved Family and Community Life through Development and Application of Sound Management Decisions and Practices.....	-----

11. Listed below are 21 activities or benefits that others have told you have been part of management education programs. Check those activities or benefits you think have been part of your management education programs.

<u>Program Benefits or Activities</u>	<u>Check here if this activity or benefit is part of your Mgt. Education Program</u>	<u>Check here if you think this activity should be part of your Mgt. Educ. Program.</u>
Assistance in Keeping Accurate Farm Records	-----	-----
Interpretation of Your Farm Operation Analysis Report	-----	-----
Assistance with Crop Planning and Soil Management	-----	-----
Livestock Feeding and Ration Improvement	-----	-----
Farm Business Credit Planning	-----	-----
Assistance with Cash-Flow Projections	-----	-----
Aiding with Building and Machine Purchases	-----	-----
Assisting with Building and Farmstead Layout	-----	-----
Income Tax Mgt. and Planning	-----	-----
Income Tax Preparation and Filing	-----	-----
Assistance with Estate Planning	-----	-----
Creating an Understanding of the Farm Product Marketing Options Avail.	-----	-----
Assistance with Livestock Health	-----	-----
Aiding in the Improvement of Quality of Livestock Production	-----	-----
Livestock Breeding and Genetics	-----	-----
Crop and Herbicide Demonstration Plot	-----	-----

Assistance with the Understandings of Farm Machine Repair and Main.	----	----
Development of Mech. Skills, such as Welding and Electrical Wiring	----	----
Assistance with Knowledge of Crop Harvesting and Handling Alternatives	----	----
Assisting with Suggestions for Farm Building Repair and Modification	----	----
Assisting in Establishing Family and Business Goals	----	----
Assistance with farm transfer and operating agreements	----	----
Assistance in interpreting gov't. farm program regulation	----	----
Coping with family problems involving mental stress and pressure	----	----
Assistance with understanding the legal and tax aspects of foreclosures, bankruptcy and other financial crisis situations.	----	----
Assistance with communication among and between family members regarding the operation and management of the business.	----	----
Assistance with planning personal expenditures and budgeting	----	----
Assistance with organizing and managing the farm office including computer and software selection.	----	----
Provides an unbiased impartial perspective of the farm business	----	----

12. In your own words, list two reasons why you decided to enroll in a farm management education program.

1. _____

2. _____

13. In your own words, list two of the things you like best about the farm management education program.

1. _____

2. _____

14. Everyone recognizes that the income from farming is not as good as it could be, but given these conditions, how much of your annual income do you attribute to your participation in the farm management education program? How many more or less dollars in net income did you feel you earned each year than other farmers like you who were not in the farm management education program? \$_____

15. If you were visiting with your neighbors about the farm management education program, what would you recommend to them? On a scale of 0 to 10 mark where you think your response would best fit. Circle your response.

0	1	2	3	4	5	6	7	8	9	10
Strongly					Neither					Strongly
<u>Discourage</u>					Discourage					<u>Encourage</u>
them from					nor					them to
Enrolling					Encourage					Enroll

Check:

Period: March 1 - April 30, 1985 ____
Period: March 1 - April 30, 1986 ____

Farm Management Impact Study
U of M/SBVTE - 1986

Enumerator _____

NOTICE OF FORECLOSURES

Newspaper _____

County _____

This
Space For
Coordinator
Use
Only

Date of Publication Mo/Day	Name of Person(s) Named in Action	Was Creditor A Bank Farm Credit Agency	County	Member of Fmgt	Not A Member
----------------------------------	--------------------------------------	---	--------	-------------------	-----------------

Richardson Survey, 1979
Adult Farm Management Program Analysis

How many years have you been enrolled in the adult farm management program?

_____ 1 to 3 _____ 4 to 6 _____ over 6

How many years do you anticipate enrollment in the adult farm management program will be of benefit to you?

_____ 1 to 3 _____ 4 to 6 _____ 7 to 10 _____ over 10

What do you consider to be the most important contributions to your family from participation in the adult farm management program? (Rank in order of importance).

- _____ 1. Increased earnings.
- _____ 2. Less workload.
- _____ 3. Improved outlook on farm business opportunities.
- _____ 4. Improved management skills.
- _____ 5. Better knowledge of the capabilities of yourself and your business.
- _____ 6. Exchange of ideas, skills, and techniques gained through class discussion, tours, and instructor's visits.
- _____ 7. Community social aspects gained through attendance at banquets, tours, and class meetings.
- _____ 8. Development of greater confidence in actions taken and a feeling that greater goals can be accomplished.
- _____ 9. Considering the farm operation more as a business than a way of life.
- _____ 10. A feeling of greater security in the business decisions made.

Which type of instruction do you feel you gain the most benefit from? (Rank in order from best to poorest).

- _____ 1. Classroom meetings.
- _____ 2. Farm tours with prepared material.
- _____ 3. Farm tours in small groups with impromptu questions and answers.
- _____ 4. Individual farm visits to your farm by the instructor on a scheduled basis.
- _____ 5. Newspaper articles of local concern.
- _____ 6. Monthly farm management newsletter.
- _____ 7. Farm demonstration plots.

The farm management program you participate in provides you with certain benefits and assistance in operating your farm business. Check the practices you currently are aware of that are provided by your farm management program and those you think should be provided.

	<u>Currently Provided</u>	<u>Should be Provided</u>
1. Assistance in keeping accurate farm records.	_____	_____
2. Interpretation of your farm operation analysis report.	_____	_____
3. Assistance with crop planning and soil management.	_____	_____
4. Livestock feeding and ration improvement.	_____	_____
5. Farm business credit planning.	_____	_____
6. Assistance with cash-flow projections.	_____	_____
7. Aiding with building and machine purchases.	_____	_____
8. Assisting with building and farmstead layout.	_____	_____
9. Income tax management and planning.	_____	_____
10. Income tax preparation and filing.	_____	_____
11. Assistance with estate planning.	_____	_____
12. Creating an understanding of the farm product marketing options available.	_____	_____
13. Assistance with livestock health.	_____	_____
14. Aiding in the improvement of quality of livestock production.	_____	_____
15. Livestock breeding and genetics.	_____	_____
16. Crop and herbicide demonstration plots.	_____	_____
17. Assistance with the understanding of farm machine repair and maintenance.	_____	_____
18. Development of mechanical skills, such as welding and electrical wiring.	_____	_____
19. Assistance with knowledge of crop harvesting and handling alternatives.	_____	_____
20. Assisting with suggestions for farm building repair and modification.	_____	_____
21. Assisting in establishing family and business goals.	_____	_____
22. _____	_____	_____
23. _____	_____	_____
24. _____	_____	_____
25. _____	_____	_____

General benefits you may expect to receive from participation in the adult farm management program are listed here. Rank them in the order of priority you feel the program of instruction should have. (Place a "1" in front of the item you feel is highest priority, a "2" in front of the item of next highest priority, etc.).

- _____ 1. Assistance in setting goals and planning.
- _____ 2. Assistance in keeping complete and accurate farm records, including inventories.
- _____ 3. Assistance in interpreting and analyzing farm records.
- _____ 4. Technical assistance relative to crops, livestock, buildings and equipment.
- _____ 5. Assistance in planning, implementing and evaluating changes in the farm business for more efficient and profitable use of resources.
- _____ 6. Improved family and community life through development and application of sound management decisions and practices.

Which type of classroom meeting do you like the best? (Rank in order from best to poorest).

- _____ 1. Discussion lecture with visuals.
- _____ 2. Discussion lecture without visuals.
- _____ 3. Worksheets for you to work on.
- _____ 4. Demonstrations.
- _____ 5. Panel discussion.
- _____ 6. Small groups working together.
- _____ 7. Question and answer session.
- _____ 8. Viewing films and slides.

How often do you feel the instructor should make on-farm visits to your farm?

- _____ Monthly
- _____ Six times yearly.
- _____ Twice yearly plus necessary analysis visits.
- _____ Only necessary visits to complete the analysis.
- _____ Only when asked to come out.

If a series of classes is held in an area in which you are interested, how many classes would you most likely attend?

- _____ 10 or more
- _____ 5 to 10
- _____ 1 to 4
- _____ none

What type of farmer are you?

- _____ Both crops and livestock.
- _____ Just crops.
- _____ Just livestock.

Participation in the adult farm management program probably has resulted in some changes in your farm business and/or some changes in yourself. Place a check mark in front of the farm practices, behavior or attitudes that you directly or indirectly perceive to be the result of your participation in the adult farm management program. Please consider each item carefully.

- _____ 1. Keeping an accurate set of business records.
- _____ 2. Greater concern for the quality and quantity of feed fed.
- _____ 3. Using artificial insemination or greater concern in quality breeding.
- _____ 4. Greater concern for livestock health.
- _____ 5. Using improved livestock housing facilities.
- _____ 6. Use of more labor saving equipment.
- _____ 7. Using improved marketing methods (forward contracting, hedging, direct selling).
- _____ 8. Use of recommended crop varieties.
- _____ 9. Using more effective herbicides and insecticides.
- _____ 10. Soil testing before fertilizing.
- _____ 11. Tissue testing to evaluate fertilizer utilization.
- _____ 12. Conducting personal test plots to aid in the decision making processes.
- _____ 13. Using narrower rows.
- _____ 14. Using certified seed.
- _____ 15. Using improved crop handling equipment.

- ___ 16. Constructing a periodic cash flow projection.
- ___ 17. Keeping the credit institution properly informed.
- ___ 18. Constructing an estate plan.
- ___ 19. Involved with income tax planning.
- ___ 20. Using farm records as the basis for decision making.
- ___ 21. Involved in more community organizations.
- ___ 22. Officer or leader in an organization.
- ___ 23. Attend tours and meetings to keep current in areas of importance to me.
- ___ 24. Subscribe to and read more farm publications.
- ___ 25. Participate in more social functions and community activities.
- ___ 26. Attitude towards education for myself and my family has changed.
- ___ 27. More content with the position I have in life.
- ___ 28. More content with the farm business I have.
- ___ 29. Involved in political activity of some sort.
- ___ 30. Enjoying more leisure time.
- ___ 31. Greater income for family living.
- ___ 32. Greater income for family living compared to others in the community that are not program participants.
- ___ 33. Increased net worth.
- ___ 34. Improved attitude toward risk and risk taking.
- ___ 35. _____
- ___ 36. _____
- ___ 37. _____
- ___ 38. _____

Why did you enroll in the farm management program?

How can the adult farm management program be improved?

In your own words, explain what you like most about the farm management program.

Are other management programs or record keeping systems available to you in your area? _____

If so, what are they?

After 6 years in the adult farm management program, would you consider enrolling in a private program of one type or another rather than continue in the current adult farm management program? _____

Why or why not?

What is your perception of the average increase in annual income you have had as a result of your participation in the adult farm management program?

\$ _____

How many farm families do you think one adult farm management instructor can effectively work with? _____

Should the adult farm management instructor work with farm families for more than 6 years? _____

Is it unreasonable to expect adult farm management instructors to be working with at least 42 farmer-cooperators with less than 6 years experience in the program? _____

If so, why? _____

Is the farm management program you are enrolled in currently turning down anyone who desires to enroll in the program? _____

If so, why? _____

Adult farm management instructors can be and are involved in a multitude of activities. Most of these activities are listed on the attached slips of paper. Using the grid on this sheet, sort these activities into piles 1 through 9 according to how you believe adult farm management instructors should be involved. The large number in each square of the grid indicates how many slips may be placed in each pile. Note - The small number in the corner of each square of this grid indicates the degree of priority you would assign to the activity in question. Square number 1 is the activity you would give highest priority to; square number 9 the lowest priority. When finished, fill in the blanks of each square using the numbers on the back of each slip of paper. The numbers have been randomly placed and are significant only to the researcher.

<p>1</p> <p>_____</p> <p>1</p> <p>slip of paper</p>	<p>2</p> <p>_____, _____</p> <p>2</p> <p>slips of paper</p>	<p>3</p> <p>_____, _____, _____</p> <p>3</p> <p>slips of paper</p>
<p>4</p> <p>_____, _____, _____, _____</p> <p>4</p> <p>slips of paper</p>	<p>5</p> <p>_____, _____, _____, _____, _____</p> <p>5</p> <p>slips of paper</p>	<p>6</p> <p>_____, _____, _____, _____</p> <p>4</p> <p>slips of paper</p>
<p>7</p> <p>_____, _____, _____</p> <p>3</p> <p>slips of paper</p>	<p>8</p> <p>_____, _____</p> <p>2</p> <p>slips of paper</p>	<p>9</p> <p>_____</p> <p>1</p> <p>slip of paper</p>

Teaching adult farm business management	Teaching adult enterprise courses (Dairy prod'n., corn prod'n., etc.)	Teaching adult agriculture mechanics classes	Teaching a young farmer course
Consultation with other taxpayers and organizations not formally enrolled in classes	Lesson planning	Obtaining and preparing teaching materials	Maintaining the school facilities
Conducting on-farm instruction	Attending farm management instructors meetings	Attending professional meetings	Attending classes and informational sessions
Teaching high school classes	Assisting with FFA activities	Non-teaching school related activities assigned by school administration	Non-teaching school related activities not assigned by school administration
Participating in and/or attending community civic activities	Confer with administrators	Meeting with local advisory committees and/or groups	Keeping current through reading of books and magazines

Appendix C

Table C1. Farm Auctions by County and by Farm Management Membership Status

<u>County</u>	<u>Members</u>	<u>Non-Members</u>
Benton	1	2
Big Stone	0	5
Blue Earth	0	8
Brown	2	5
Carver	0	1
Cass	0	3
Chippewa	4	22
Chisago	0	1
Clay	1	23
Cottonwood	0	11
Dakota	0	3
Dodge	0	1
Douglas	2	17
Faribault	0	4
Freeborn	1	7
Goodhue	4	14
Grant	1	5
Jackson	0	6
Kandiyohi	6	24
LeSuer	0	3
Lincoln	0	1
Lac Qui Parle	2	8
Lyon	0	10
Marshall	0	6
Martin	0	7
McLeod	1	9
Meeker	1	21
Morrison	0	16
Mower	1	6
Murray	0	5
Nobles	1	13
Olmsted	4	22
Ottertail	0	11
Pennington	2	5
Pipestone	0	21
Pope	1	12
Red Lake	0	2
Redwood	0	25
Renville	0	20
Rice	0	15
Rock	1	29
Sherburne	0	3
Sibley	0	2
Stearns	2	24
Steele	3	14
Stevens	0	17
Swift	3	28
Todd	9	92

Continued

Traverse	0	3
Wabasha	1	6
Wadena	0	11
Waseca	0	11
Watonawan	0	8
Winona	0	2
Wright	0	4
Yellow Medicine	2	12
	<hr/>	<hr/>
	56	666



Table C2. Foreclosures By Farm Management Membership Status and Type of Creditor: 16 Counties Represented

	Bank	Credit Agency	Individual	Insurance Companies	Total
Members	3	4	1	1	9
Non-Members	58	39	4	16	117
					126

FORECLOSURES

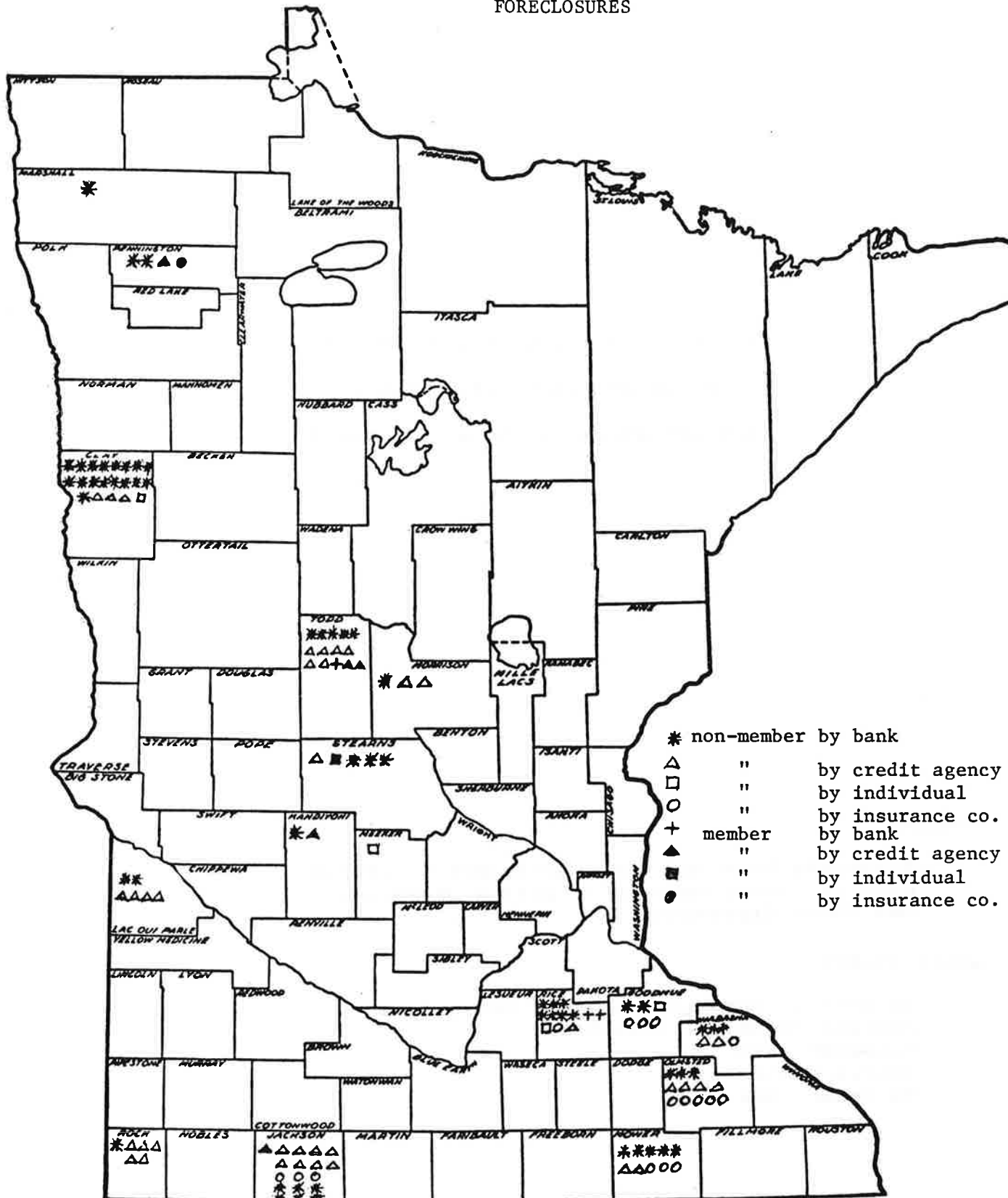


Figure 4. Farm Business Foreclosures by Farm Management Membership Status and Type of Creditor

STATEWIDE SUMMARY
Selected Items 1978-1985
Farm Operators Financial Statement

Source:

Minnesota Farm Business Management Education
Program Annual Reports - Table 5 Operators
Net Worth Statement

Compiled by:

Delbert L. Hodgkins, Area Ag Coordinator
Mankato Technical Institute
November 1985
Dennis Lehto
December 1986

EXPLANATION OF RATIOS USED AND SPECIFIC METHOD OF CALCULATION

Table 10 - Ratio of Total Assets to Total Liabilities. sometimes called the Net Capital Ratio, measures the degree of safety in the farm business. It shows the number of dollars available to cover each dollar of debt.

Table 11 - Ratio of Net Worth to Liabilities, is a ratio of the owners equity to his total debt. It expresses the percentage of his liabilities that are covered by Net Worth.

Table 17 - Ratio of Non-Real Estate Assets to Non-Real Estate Liabilities, sometimes called the Intermediate Ratio. It is calculated by dividing the sum of Livestock Inventory, plus Crop, Seed, Feed and Supply Inventory, plus Machinery and Equipment plus the Non-Farm Asset Inventory by the Total Non-Real Estate Liabilities which are ordinarily listed as Chattel Mortgages, Notes, and Accounts Payable.

Table 13 - Real Estate Assets to Real Estate Liabilities, calculated by dividing the inventoried value of real estate (land, buildings, house, etc.) by the amount of real estate mortgage and/or other real estate liability.

Table 16 - Ratio of Total Farm Expense to Total Farm Receipts, sometimes called the Gross Ratio, expresses the percentage of each dollar's worth of income consumed by expenses.

Table 17 - Ratio of Cash Operating Expense to Adjusted Total Farm Sales, is calculated by dividing the cash expenses by the cash income, adjustments having for sale of capital assets and capital assets purchased.

Table 18 - Ratio of Total Farm Receipts to Average Farm Capital - Operator Share, sometimes called the Capital Turn Over Ratio is calculated by dividing the owner's total receipts, cash and accrued, by the average capital owned that year. It indicates the amount of income for each dollar of investment in the business.

TABLE 1 - NUMBER OF FARMS
Number of Farms included in average by area each year

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	451	509	482	479	425	356	302	271
Northwest Area (2) Staples	287	248	297	295	200	156	160	204
West Central Area (3) Willmar	491	505	550	501	468	430	389	380
Southwest Area (4) Jackson	290	302	340	296	301	304	218	289
South Central Area (5) Mankato	351	327	365	288	285	244	249	288
Southeast Area (6) Austin	317	287	342	200	206	291	208	306
TOTAL	2187	2178	2376	2059	1885	1472	1526	1738

TABLE 2 - VALUE OF FARM CAPITAL OWNED BY OPERATOR

Includes: Livestock Inventory, Crop, Seed, Feed, & Supply Inventory, Machinery and Equipment Inventory, Land and Buildings. Conservative market values are assigned crops and livestock; land inventoried at cost; and depreciated value is used for buildings and machinery.

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$204228	\$264575	\$288092	\$351407	\$362880	\$361639	\$370683	\$362421
Northeast Area (2) Staples	125441	158718	202595	224308	259242	238138	262194	238494
West Central Area (3) Willmar	226557	269802	301861	350765	342149	334428	337740	315804
Southwest Area (4) Jackson	292122	323602	374940	342635	387711	384610	365748	312196
South Central Area (5) Mankato	286588	337366	342533	361321	365715	369619	355569	325415
Southeast Area (6) Austin	260110	299002	343149	341249	339153	360011	332519	345761
APPROXIMATE AVERAGE	\$232500	\$275500	\$308860	\$328600	\$342800	\$341400	\$337400	\$316682

TABLE 3 - LAND AND FARM BUILDING
VALUE PER ACRE OWNED

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$437.88	\$446.00
Northeast Area (2) Staples	-	262.96	327.82	357.60	407.38	377.76	392.28	446.00
West Central Area (3) Willmar	-	663.48	771.00	905.21	881.55	896.98	906.36	879.00
Southwest Area (4) Jackson	-	979.19	1178.32	1210.38	1309.21	1392.93	1374.31	1384.00
South Central Area (5) Mankato	-	704.00	822.87	910.40	930.83	998.83	1157.52	1200.00
Southeast Area (6) Austin	-	1113.83	753.72	811.06	810.37	855.27	831.04	1022.00
APPROXIMATE AVERAGE	\$ -	\$750.00	\$770.00	\$840.00	\$870.00	\$900.00	\$850.00	\$896.00

TABLE 4 - DEBT (ALL SOURCES) PER ACRE OWNED

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$442.00
Northeast Area (2) Staples	-	347.89	415.61	461.50	491.94	472.99	523.42	553.00
West Central Area (3) Willmar	-	605.36	753.90	841.10	945.82	945.78	992.10	891.00
Southwest Area (4) Jackson	-	995.13	1154.08	1339.41	1464.02	1529.33	1415.79	1410.00
South Central Area (5) Mankato	-	630.31	820.85	891.75	959.22	993.00	1113.00	1073.00
Southeast Area (6) Austin	-	664.39	928.58	1057.76	1093.31	1126.37	1190.47	1220.00
APPROXIMATE AVERAGE (5 areas, NW excluded)	\$ -	\$650.00	\$815.00	\$920.00	\$990.00	\$1015.00	\$1045.00	\$932.00

TABLE 5 - TOTAL ASSETS OWNED BY OPERATOR
FARM AND NON-FARM

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$242329	\$310245	\$335366	\$351407	\$415130	\$419987	\$434831	\$430275
Northeast Area (2) Staples	146203	165043	232803	256256	296840	274503	302169	281253
West Central Area (3) Willmar	258253	305717	301861	394415	390312	377715	387379	364719
Southwest Area (4) Jackson	329349	368203	419078	387735	438090	443172	426455	361312
South Central Area (5) Mankato	329868	385507	396914	421056	430725	427657	416591	388353
Southeast Area (6) Austin	254300	337991	388654	387936	386050	416993	385389	400327
APPROXIMATE AVERAGE	\$260050	\$315450	\$345780	\$366470	\$392860	\$393340	\$39130	\$371040

TABLE 6 - TOTAL LIABILITIES
TOTAL OF ALL DEBTS OWED BY OPERATOR

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$ 94124	\$141813	\$154719	\$232898	\$226441	\$220958	\$236737	\$240288
Northeast Area (2) Staples	64753	91043	113586	132912	153485	149795	179325	181929
West Central Area (3) Willmar	105536	128881	153419	189837	208174	201167	219552	217570
Southwest Area (4) Jackson	128911	161708	167192	203054	232632	235823	218457	203056
South Central Area (5) Mankato	131276	155887	170164	196721	211699	211467	203379	190094
Southeast Area (6) Austin	254300	337991	388654	387936	386050	416993	385389	259460
APPROXIMATE AVERAGE	\$129800	\$169500	\$194600	\$223900	\$236400	\$239300	\$240400	\$215400

OPERATORS NET WORTH

TABLE 7 - NET WORTH - STATEMENT OF FINANCIAL POSITION AND
MEASURE OF FINANCIAL PROGRESS

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$133412	\$168432	\$180647	\$176082	\$188689	\$199029	\$198093	\$189987
Northeast Area (2) Staples	81450	9400	119217	123343	143355	124708	122844	99323
West Central Area (3) Willmar	152717	176836	184697	204578	182138	176548	167627	147149
Southwest Area (4) Jackson	200437	206495	231866	184681	205458	207349	207998	158256
South Central Area (5) Mankato	198593	229620	226750	224336	219026	216190	213212	198260
Southeast Area (6) Austin	147419	156008	177401	155334	146725	159054	124724	140867
APPROXIMATE AVERAGE	\$152300	\$157800	\$186800	\$178100	\$180900	\$180500	\$172400	\$155640

TABLE 8 - PERCENT OF LIABILITIES THAT ARE NON-REAL ESTATE

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	51%	50%	47%	45%	43%	42%	42%	40%
Northeast Area (2) Staples	48%	45%	43%	46%	47%	46%	45%	47%
West Central Area (3) Willmar	45%	50%	43%	44%	44%	43%	43%	41%
Southwest Area (4) Jackson	52%	55%	51%	51%	49%	47%	42%	46%
South Central Area (5) Mankato	47%	48%	44%	41%	44%	41%	40%	37%
Southeast Area (6) Austin	45%	44%	43%	42%	43%	39%	42%	39%
APPROXIMATE AVERAGE	48%	49%	45%	45%	45%	43%	43%	42%

TABLE 9 - PERCENT OF LIABILITIES THAT ARE REAL ESTATE MORTGAGES

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	49%	50%	53%	55%	57%	58%	58%	60%
Northeast Area (2) Staples	52%	55%	57%	54%	53%	54%	55%	53%
West Central Area (3) Willmar	55%	50%	57%	56%	55%	57%	57%	59%
Southwest Area (4) Jackson	49%	45%	49%	49%	51%	53%	55%	54%
South Central Area (5) Mankato	53%	52%	56%	55%	56%	59%	60%	63%
Southeast Area (6) Austin	55%	56%	57%	58%	57%	61%	58%	61%
APPROXIMATE AVERAGE	52.1%	51.3%	54.8%	55.2%	54.8%	57.0%	57.2%	58%

TABLE 10 - RATIO OF TOTAL ASSETS TO TOTAL LIABILITIES

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	2.22	2.19	2.17	1.76	1.83	1.90	1.84	1.79
Northeast Area (2) Staples	2.26	2.03	2.05	1.93	1.93	1.83	1.68	1.55
West Central Area (3) Willmar	2.45	2.37	2.20	2.08	1.88	1.88	1.76	1.68
Southwest Area (4) Jackson	2.55	2.28	2.24	1.91	1.88	1.91	1.95	1.78
South Central Area (5) Mankato	2.51	2.47	2.33	2.14	2.04	2.02	2.05	2.04
Southeast Area (6) Austin	1.98	1.86	1.84	1.67	1.61	1.62	1.48	1.55
APPROXIMATE AVERAGE	2.33	2.20	2.14	1.91	1.86	1.86	1.79	1.73

TABLE 11 -RATIO OF NET WORTH TO LIABILITIES

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	1.22	1.19	1.17	.76	.83	.90	.84	.79
Northeast Area (2) Staples	1.26	1.03	1.05	.93	.93	.83	.68	.55
West Central Area (3) Willmar	1.45	1.37	1.20	1.08	.88	.88	.76	.68
Southwest Area (4) Jackson	1.56	1.28	1.24	.91	.88	.91	.95	.78
South Central Area (5) Mankato	1.51	1.47	1.33	1.14	1.03	1.02	1.05	1.04
Southeast Area (6) Austin	.98	.86	.84	.67	.61	.62	.48	.54
APPROXIMATE AVERAGE	1.33	1.20	1.14	0.91	0.86	0.86	0.79	.73

TABLE 12 - RATION NON-REAL ESTATE ASSETS TO LIABILITIES

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	2.33	2.32	2.37	1.90	1.86	1.95	1.80	1.93
Northeast Area (2) Staples	2.50	2.47	2.57	2.21	2.05	1.92	1.75	1.56
West Central Area (3) Willmar	2.68	2.32	2.48	2.05	1.88	1.93	1.73	1.68
Southwest Area (4) Jackson	2.56	2.17	2.22	1.77	1.83	1.83	1.94	1.71
South Central Area (5) Mankato	2.75	2.63	2.79	2.50	2.76	2.21	2.18	2.47
Southeast Area (6) Austin	2.33	2.12	2.17	1.93	1.81	1.94	1.65	1.80
APPROXIMATE AVERAGE	2.52	2.34	2.43	2.06	2.03	1.96	1.84	1.86

TABLE 13 - RATIO REAL ESTATE ASSETS TO LIABILITIES

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	2.11	2.05	1.98	1.64	1.82	1.86	1.86	1.70
Northeast Area (2) Staples	2.02	1.67	1.65	1.68	1.84	1.76	1.63	1.53
West Central Area (3) Willmar	2.26	2.42	2.00	2.10	1.87	1.84	1.79	1.67
Southwest Area (4) Jackson	2.55	2.40	2.26	2.06	1.94	1.92	1.96	1.84
South Central Area (5) Mankato	2.30	2.33	1.97	1.89	1.74	1.90	1.97	1.80
Southeast Area (6) Austin	1.69	1.65	1.59	1.47	1.47	1.41	1.35	1.38
APPROXIMATE AVERAGE	2.32	2.09	1.91	1.81	1.78	1.78	1.76	1.65

TABLE 14 - RETURN TO CAPITAL AND FAMILY LABOR
Money available from income after farm expenses are paid, to service debts,
to provide family living, and for savings.

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$27354	\$23036	\$22491	\$10934	\$ 5049	\$12465	\$15721	\$14656
Northeast Area (2) Staples	20235	18651	22122	9337	12302	10016	4640	3824
West Central Area (3) Willmar	29911	27937	35545	10628	18018	18599	2900	9387
Southwest Area (4) Jackson	48199	20750	39844	2666	22331	13418	2421	8753
South Central Area (5) Mankato	38514	29907	41108	3013	16252	23088	5892	10783
Southeast Area (6) Austin	35500	26116	31695	5611	12271	18668	5410	9230
APPROXIMATE AVERAGE	\$33285	\$24400	\$32134	\$ 7031	\$14370	\$16042	\$ 6164	\$ 9438

TABLE 15 - NON-FARM INCOME
Income from off farm jobs, investment earnings, gifts, sale of personal assets,
tax refunds, etc.

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$ 4955	\$ 4912	\$ 6147	\$ 6845	\$ 6549	\$ 7395	\$ 8337	\$ 9982
Northeast Area (2) Staples	4262	3772	4020	4100	4466	4867	4742	6595
West Central Area (3) Willmar	2395	3370	4181	4369	5250	5925	6198	7503
Southwest Area (4) Jackson	2636	3523	3204	4332	5455	5206	6336	6091
South Central Area (5) Mankato	3746	4282	5170	4951	5555	6737	6036	8129
Southeast Area (6) Austin	4842	4745	6606	4754	4175	7211	5894	5887
APPROXIMATE AVERAGE	\$ 3639	\$ 4092	\$ 4886	\$ 4891	\$5242	\$ 6223	\$ 6257	\$ 7598

TABLE 16 -RATIO: TOTAL FARM EXPENSES TO TOTAL FARM RECEIPTS

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	.81	.89	.89	.96	.99	.96	.93	.94
Northeast Area (2) Staples	.72	.84	.81	.94	.91	.92	.99	.99
West Central Area (3) Willmar	.81	.87	.82	.99	.91	.91	1.01	.96
Southwest Area (4) Jackson	.78	.95	.85	1.00	.91	.96	1.02	.97
South Central Area (5) Mankato	.82	.90	.82	1.02	.93	.90	1.01	.97
Southeast Area (6) Austin	.81	.89	.86	.97	.93	.90	.96	.95
AVERAGE	.80	.89	.84	.98	.93	.92	.99	.96

TABLE 17 - RATIO: CASH OPERATING EXPENSE TO ADJUSTED FARM SALES. ADJUSTED SALES
DO NOT INCLUDE SALES OF CAPITAL ASSETS.

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	.71	.78	.79	.76	.83	.81	.81	.79
Northeast Area (2) Staples	.69	.74	.75	.78	.76	.76	.80	.83
West Central Area (3) Willmar	.68	.71	.73	.77	.81	.74	.82	.80
Southwest Area (4) Jackson	.74	.84	.79	.83	.85	.77	.86	.84
South Central Area (5) Mankato	.70	.73	.75	.78	.82	.74	.80	.75
Southeast Area (6) Austin	.73	.76	.80	.83	.85	.75	.86	.81
AVERAGE	.71	.76	.77	.79	.82	.76	.82	.80

TABLE 18 - RATION: FARM RECEIPTS TO AVERAGE FARM CAPITAL

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	.600	.544	.548	.554	.424	.428	.449	.462
Northeast Area (2) Staples	.611	.588	.492	.432	.396	.389	.371	.389
West Central Area (3) Willmar	.550	.536	.514	.453	.457	.450	.389	.441
Southwest Area (4) Jackson	.629	.582	.542	.538	.531	.505	.487	.504
South Central Area (5) Mankato	.592	.531	.566	.482	.477	.496	.439	.481
Southeast Area (6) Austin	.622	.592	.581	.483	.477	.524	.483	.509
APPROXIMATE AVERAGE	.601	.562	.540	.490	.460	.465	.436	.464

TABLES 19 - TOTAL CASH AND NON-CASH FAMILY LIVING EXPENSE

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$13945	\$16825	\$16886	\$21577	\$19819	\$20421	\$22636	\$22544
Northeast Area (2) Staples	9063	11000	11117	10620	10791	16415	11718	17754
West Central Area (3) Willmar	11118	14005	14203	16547	17133	16735	17041	17667
Southwest Area (4) Jackson	14069	18406	17016	17404	19106	20207	19250	18458
South Central Area (5) Mankato	13323	17608	15997	23791	19645	22045	18578	18374
Southeast Area (6) Austin	13514	16483	14763	16707	14293	17927	16907	20593
APPROXIMATE AVERAGE	\$12500	\$15700	\$15000	\$17800	\$17000	\$19000	\$17700	\$19231

TABLE 20- MONEY BORROWED

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$59786	\$72790	\$83425	\$126345	\$82919	\$75860	\$78183	\$81645
Northeast Area (2) Staples	25083	36383	33583	37430	30584	24643	30736	35995
West Central Area (3) Willmar	53111	57799	63587	84158	81939	66653	71214	62314
Southwest Area (4) Jackson	87760	117717	130937	156087	144194	123608	107339	85503
South Central Area (5) Mankato	74748	83645	86380	111021	88897	78748	70854	62243
Southeast Area (6) Austin	75165	89220	110754	109463	84614	72320	82221	82672
APPROXIMATE AVERAGE	\$62600	\$76300	\$84800	\$104000	\$85500	\$73600	\$73400	\$68395

TABLE 21 - PAID ON DEBT

	1978	1979	1980	1981	1982	1983	1984	1985
Northwest Area (1) Thief River Falls	\$44969	\$45681	\$65147	\$84007	\$69480	\$64544	\$64155	\$76595
Northeast Area (2) Staples	13930	18611	22600	25727	24561	22505	26974	32078
West Central Area (3) Willmar	33511	35969	48267	59254	64303	60368	60762	68331
Southwest Area (4) Jackson	69119	81637	110192	132726	121020	115579	95035	89238
South Central Area (5) Mankato	51221	60344	70570	81174	69787	70754	61583	68080
Southeast Area (6) Austin	57790	55913	82788	85068	71730	74697	69425	85611
APPROXIMATE AVERAGE	\$45100	\$49700	\$66600	\$78000	\$70100	\$68200	\$63000	\$70322

A D D E N D U M

Farm Operator Financial Statement Summary
Perceptions, Extrapolations, Conclusions and Trends...
Real and Imagined