

South Dakota State University
**Open PRAIRIE: Open Public Research Access Institutional
Repository and Information Exchange**

Department of Economics Staff Paper Series

Economics

7-15-1985

Agricultural Lender Attitudes on Farm Finance Crisis Management Programming by the Cooperative Extension Service

Mark Edelman

South Dakota State University

Brian Schmiesing

South Dakota State University

Diane Kolmer

South Dakota State University

Cindy Swinson

South Dakota State University

Follow this and additional works at: http://openprairie.sdstate.edu/econ_staffpaper



Part of the [Agricultural and Resource Economics Commons](#)

Recommended Citation

Edelman, Mark; Schmiesing, Brian; Kolmer, Diane; and Swinson, Cindy, "Agricultural Lender Attitudes on Farm Finance Crisis Management Programming by the Cooperative Extension Service" (1985). *Department of Economics Staff Paper Series*. Paper 33. http://openprairie.sdstate.edu/econ_staffpaper/33

This Article is brought to you for free and open access by the Economics at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Department of Economics Staff Paper Series by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

Agricultural Lender Attitudes On
Farm Finance Crisis Management
Programming By The Cooperative
Extension Service *

by
Mark A. Edelman, Brian H. Schmiesing,
Diane Kolmer, and Cindy Swinson **

Economics Staff Paper No. 85-7 ***
July 1985

ABSTRACT: Agricultural lenders were surveyed to clarify the nature of the problems faced by financially stressed farm borrowers and the appropriate Cooperative Extension Service response in educational programming. Specifically determined were skill training priorities, adequacy of farm records, appropriate delivery mechanisms, preferred target audiences, and institutional preferences.

* Paper presented at the annual meetings of the American Agricultural Economics Association, Iowa State University, Ames, Iowa, August 5-7, 1985.

** Drs. Mark A. Edelman and Brian H. Schmiesing are Assistant Professors in the Economics Department at South Dakota State University. Ms. Kolmer is a Graduate Assistant and Ms. Swinson is a Research Associate in the same Department.

*** Papers in this series are reproduced and distributed to encourage discussion of research, extension, teaching and economic policy issues and are available to anyone upon request. Economics Department Staff papers are intended primarily for peers and policy-makers. Papers are normally critiqued by some colleagues prior to publication in this series. However, they are not subject to the formal review requirements of the SDSU Agricultural Experiment Station and Cooperative Extension Service publications.

AGRICULTURAL LENDER ATTITUDES ON FARM FINANCE
CRISIS MANAGEMENT PROGRAMMING BY THE
COOPERATIVE EXTENSION SERVICE

The future direction of the Cooperative Extension Service (CES) and tripartite mission of the land grant university system is directly linked to the institutional ability of the CES in solving the contemporary problems of society [4,7,8,9]. This concept has become even more relevant with the current farm finance crisis. The CES challenge is to position economics at the cutting edge of experience and apply it to people's needs of solving multifaceted resource problems.

Many federal, state, and local CES staff and administrators are attempting to redefine program objectives and portfolios in order to respond within the limits of available resources [1,6]. This paper reports the results of an agricultural lender survey that was specifically designed to assist in developing a CES response to the farm finance situation in the North Central Region.

Redefining Extension Priorities

The first step in redefining priorities is awareness that a problem exists. According to Schuh [5], the original concept of the land grant institution was to reward faculty as they contributed to the solutions of societal problems, not solely for publications in scholarly professional journals. Schuh alleges, that universities are failing, for

example, to address the current problems and the large agricultural economic dislocations in the U.S., as the economy opens itself to the international economy.

Hildreth and Armbruster [3, p. 856], suggest that extension programs designed by agricultural economists must be able to adjust to changes in agricultural finance, marketing, production, consumers, and rural communities.

Brown [2, p. 862] believes that the county agent will continue to be the main link in the CES chain. However, he encourages targeting more diverse clientele. He suggests this might be done by adapting new technological developments in electronic communication, individualized learning, and data storage to allow the agent to assist the commercial farmer with more complex and sophisticated management decision-making tools.

Bolen and Lucas [1, p.13], in a report for the Extension Committee on Organization and Policy (ECOP), outlined perceptions of the data base requirements and objectives in the CES response to the present farm finance situation. The proposed CES objectives included (1) utilization of an interdisciplinary systems approach, (2) increase emphasis on economic efficiency, (3) increase emphasis on farm and family financial management, (4) increase understanding of risk management, and (5) increase awareness of family and farm personal stress.

Bolen and Lucas also identified operational options for meeting the objectives. The alternatives identified were to (1) organize a systems approach for utilization of diverse expertise in solving multifaceted problems, (2) conduct indepth workshops to integrate finance, marketing, and production, (3) incorporate computer analysis to review alternatives for farm families, (4) conduct one-on-one counseling of individual farming operations, (5) improve linkage with research, and (6) establish close working relationships with industry and the financial community.

Several operational alternatives are being tested in various states. In USDA, the Extension Service [6] has assisted with funding special projects in several selected states. Most states have already implemented crisis management programs and others are in the process of change. The programming response has been broad in scope. Several types of delivery mechanisms are being attempted.

Conceptual Hypotheses

Several surveys have been conducted to inventory the level of financial stress. However, less emphasis has been placed on documenting the perceived decision-making weaknesses of producers, applied management information priorities, and delivery mechanisms that generate confidence and support by those in industry and the financial community. Therefore, testing program design hypotheses by

surveying attitudes of agricultural lenders might facilitate CES administrators and staff in designing crisis management programs that gain acceptance and monetary support when only limited hard resources are available.

In this study, several conceptual hypotheses were tested to determine agricultural lender preferences on the options in program design. The questions were specifically designed to determine (1) institutional preferences in management training programs, (2) subject matter training priorities, (3) delivery mechanism priorities, and (4) clientele targeting priorities. The survey also documented financial stress and credit evaluation practices, however, those results are beyond the scope of this article.

Data and Procedures

South Dakota provides a unique opportunity to compare and contrast responses due to regional agricultural enterprise differences. The northeast area of the state typifies the northern small grains region of the upper midwest. The southeast area of the state typifies cornbelt agriculture. The western wheat and range land area of the state typifies the Great Plains. Thus, the survey area was divided into three regions for analysis.

Size of the target population and survey cost were not prohibitive, so, the population of South Dakota agricultural lenders were surveyed. The survey population included 261

commercial bank loan officers, 30 Production Credit Association (PCAs) officers, 15 Federal Land Bank (FLBs) officers, and 40 Farmers Home Administration (FmHAs) officers.

During the first week of November 1984, a survey questionnaire was sent to senior agricultural loan officers of all 346 agricultural lenders in South Dakota. A letter explaining the purpose of the survey was mailed one week prior to the survey and a reminder postcard was sent one week following the survey.

The lenders returned 184 surveys for a 53.2 percent response rate. In the authors' mail survey experience, this is an exceptionally high response rate and lends additional confidence in the implications of the results.

The response rates are fairly consistent across regions. However, FmHAs and the Farm Credit System (FCS), which includes the PCAs and FLBs, did exhibit higher response rates than did banks (Table 1). Therefore, the results may slightly reflect non-bank preferences more than in numerical proportion.

Analysis of Results

Six specific program planning questions were asked on the survey and were analyzed. Analysis of Variance (AOV) using a General Linear Model (GLM) and the Waller Duncan (WD) test were used to analyze the responses by lender and by region. GLM is used when data do not fit into a balanced

Table 1. Survey Response By Agricultural Lender and Region.

	Southeast Cornbelt	Northeast Small Grains	Western Rangeland	Total
Banks	56 (51.9%)	44 (44.4%)	23 (42.6%)	123 (47.1%)
FCS	10 (66.7%)	14 (82.3%)	9 (69.2%)	33 (73.3%)
FmHA	8 (80.0%)	12 (63.2%)	8 (72.7%)	28 (70.0%)
Total	74 (55.6%)	70 (51.6%)	40 (51.3%)	184 (53.2%)

design, as is the case with this data. The Waller-Duncan test is less powerful than the t-test, but is designed to analyze multiple comparisons of means of unequal observations. This approach minimizes Bayes risk--risk of Type I error--and presents visual representations of significantly different variable means.

Institutional Preferences in Training

The first question was designed to clarify institutional preferences for who should conduct financial management training programs (Table 2). The lenders responded to seven options. The Waller-Duncan representation indicates that means with the same letter are not significantly different. Thus, the results indicate that lender preferences for financial institutions and the CES are significantly higher than the remaining choices. Preferences for the State Department of Agriculture are also indicated to be significantly lower than the rest of the options, however, all alternatives received more than majority agreement.

In addition, the AOV indicated no significant differences in preferences across regions but did indicate significant differences across lenders. FCS officers showed significantly less agreement for almost all institutions being involved in financial management training compared to banks and the FmHA.

Table 2. Institutional Preferences in Financial Training.

DO YOU BELIEVE THAT THE FOLLOWING INSTITUTIONS SHOULD BE INVOLVED WITH CONDUCTING FINANCIAL MANAGEMENT EDUCATION AND COUNSELING PROGRAMS? Rank 1 for strongly agree, 2 for agree, 3 for neutral, 4 for disagree, 5 for strongly disagree.

Mean Response	Institutional Preference	Waller Duncan	N Obs.
1.6868	Financial Institutions	A	182
1.7120	Cooperative Extension Service	A	184
1.9670	Area Vo-Ag Instructors	B	182
2.0879	Farmers Home Administration	B C	182
2.0924	Private Farm Management Firms	B C	184
2.1848	Successful Farmers and Ranchers	C	184
2.4426	State Department of Agriculture	D	183

Which Delivery Method?

The second question was designed to confirm the level of support for CES and determine preferences on an alternative set of delivery mechanisms (Table 3). Lenders responded to five options. Presently, one-on-one counseling is provided by the lenders and State Department of Agriculture. Knowledge of this program may have contributed to the lower priority for CES initiating a program that is duplicative.

The responses were not significantly different across regions of the state. However, responses were significantly different across lenders. In particular, the FCS officers gave significantly less agreement than did the FmHA to management associations and one-on-one counseling. However, the mean for each lender group was still significantly lower than the neutral preference level, indicating agreement with these two options.

Who Should Be Targeted?

Question three was specifically designed to approximate the number of farm women keeping the records as an indicator for targeting financial management programs (Table 4). The overall mean indicates 57.5 percent of the married borrowers have the wife keeping the records for the farming operation.

Further analysis indicates significant differences significantly higher percentage of women keeping the farm

Table 3. Delivery Method Preference of Agricultural Lenders.

 IN ORDER TO INCREASE THE ODDS FOR SURVIVAL OF THOSE
 BORROWER'S UNDER FINANCIAL STRESS, THE TAXPAYER FUNDED
 COOPERATIVE EXTENSION SERVICE SHOULD: Please indicate 1 for
 strongly agree, 2 for agree, 3 for neutral, 4 for disagree
 and 5 for strongly disagree.

Mean Response	Delivery Mechanism Options	Waller Duncan	N Obs.
1.7956	Conduct workshops for improving management skills.	A	181
2.1657 (L)	Organize record keeping management associations.	B	181
2.1944	Organize self-study marketing and management clubs.	B	180
2.3005 (L)	Provide one-on-one counseling.	B	183
4.1547	Not do financial management programs.	C	181

 (L) = Significant Difference Across Lenders.

Table 4. Farm Women In Financial Management.

 WHAT APPROXIMATE PERCENTAGE OF YOUR MARRIED BORROWERS HAVE
 THE WIFE KEEPING THE FINANCIAL RECORDS FOR THE FARMING
 OPERATION?

Mean Response	Lenders and Regions	Waller Duncan	N Obs.
57.577	All Lenders, All Regions		180
54.597	Banks	A	119
60.364	Farm Credit System	A B	33
66.964	Farmers Home Administration	B	28
55.250	Northern Small Grains	A	68
56.486	Southeast Cornbelt	A B	72
63.500	Western Range	B	40

records and western range land areas exhibited a significantly higher percentage of women keeping the records. However, in all cases, more than a majority of the married borrowers have the spouse keeping the records. These results imply that a special effort might be targeted for wives--particularly FmHA and range land areas--to attend financial management workshops and counseling programs.

Adequacy of Farm Records

A fourth planning question was designed to determine the adequacy of farm record keeping for making key financial and enterprise decisions (Table 5). Overall, lenders believe that records are most inadequate for financial planning, with 52.3 percent of the records being inadequate for these purposes. Records are moderately inadequate for farm enterprise planning purposes. Records are least inadequate for tax planning purposes.

No significant differences occurred across regions. However, some significant differences did occur across lenders. Compared to other lenders, FmHA indicated significantly lower percentage of "Good" records for tax planning and farm enterprise planning purposes and a significantly higher percentage of "Inadequate" records for tax planning purposes. Except for indicated differences, the remaining cell comparisons are consistent across lenders.

The results suggest that present and past attention has

Table 5. Lender Attitudes on Farm Record Keeping.

 BASED ON YOUR EXPERIENCE, HOW WOULD YOU BEST DESCRIBE THE RECORD KEEPING ABILITIES OF YOUR FARM CUSTOMERS FOR THE PURPOSES OF (1) TAX PLANNING, (2) FARM MANAGEMENT, AND (3) FINANCIAL PLANNING? Describe the quality of records by indicating the approximate percentage of customers in each category: a. Good b. Adequate c. Inadequate.

	Tax Planning	Farm Management	Financial Planning
Good Records	27.4% (L)	24.4% (L)	17.7%
Adequate Records	37.2%	34.0% (L)	30.0% (L)
Inadequate Records	35.4% (L)	41.6%	52.3%
Total	100.0%	100.0%	100.0%

 (L) = Significant Difference Across Lenders

been focused on records for tax planning purposes. Perhaps special attention should focus on how key management decisions might incorporate relevant record keeping information used to determine enterprise profit and loss, and financial warning signals.

Priorities in Training

The last two questions focus on establishing training priorities for assisting agriculture. Both general subject priorities (Table 6) and specific finance management questions (Table 7) were asked to gauge lender preferences.

The analysis of general subject priorities (Table 6) did not indicate consistently significant differences across regions or lenders. However, significant interactions did occur across skills, lenders, and regions of the state. Plotting the results, indicated little visual differences in rankings across lenders and regions. The statistically significant differences in the interaction reflected variations in degree of slope in the trends rather than major reversals in ranking across lenders or regions. The only major reversal across lenders or district was that FCS places a higher priority on time and stress management than on production management, whereas banks and FmHA priorities are consistent with the overall results that rank production as a higher priority than time and stress management.

The final program planning question compares specific

Table 6. Skill Training Priorities of Agricultural Lenders.

 "WHICH OF THE FOLLOWING MANAGEMENT SKILLS OF YOUR BORROWERS DO YOU BELIEVE ARE MOST IN NEED OF IMPROVEMENT? Please rank 1 for the most important skill, 2 for the second most important, etc.

Mean Response	Management Skill Area	Waller Duncan	N Obs.
1.3000	Improved financial planning	A	180
1.9371	Improved marketing practices	B	175
3.3006	Improved production practices	C	163
3.4785	Time and stress management skills	D	163

Table 7. Workshop Topic Preferences of Agricultural Lenders.

WHICH OF THE FOLLOWING TOPICS SHOULD BE INCLUDED IN A ONE DAY EDUCATIONAL WORKSHOP DESIGNED FOR FINANCIALLY STRESSED FARM BORROWERS? Please rank 1 as very important, 2 as important and 3 as neutral.

Mean Response	Topic Preference	Waller Duncan	N Obs.
1.1685	Projecting cash flow needs	A	184
1.4098	Understanding financial statements	B	183
1.4185	Records for decision-making	B	184
1.4293	Analysis of enterprise profit/loss	B	184
1.5495	Price increasing marketing strategies	C	182
1.7143	Cost cutting production strategies	D	182
1.8306	Interest rates and inventory management	D E	183
1.8424	What's in a "Good Farm Credit Rating"	E	184
1.8895	Financial reorganization options	E	181
1.9344	Family goals and income expectations	E F	183
2.0272	Time management	F	184
2.1694	Stress management		G 183
2.1803	Planning for alternative employment		G 183
2.1813	Agricultural price and interest rate outlook		G 182

management skill topics for designing a one-day short-course workshop (Table 7). Financial management skills received highest priority. Top priorities included "Projecting cash flow", "Understanding financial statements", and "Record-keeping." The AOV indicated no significant differences across lenders and regions.

Implications and Use of the Results

First and foremost, the agricultural lender survey analysis was very helpful in evaluating and re-designing CES programs. Second, these and other results from the survey were specifically used to design a financial warning signal worksheet used in teaching farm and ranch audiences how to better diagnose financial problems. In addition, the survey generated lender as well as other public support for CES being involved in conducting financial management education programs. The results were widely reported by state media and used by decision-makers to more accurately discuss the nature and scope of the agricultural economic situation.

As a result of the survey, the state CES has altered its program portfolio. The results were used to design a multidisciplinary four-hour short-course titled "Farm Finance Tips for Saving \$15,000". Prior to each workshop, a planning meeting was held with local lenders and field staff to identify the targeted clientele for special invitation. Special effort was used to encourage both spouses to attend.

Because of low resources, the program required local lenders to sponsor travel and publication expenditures.

The workshop agenda included diagnosis principles and conceptual farm and ranch management options. Marketing, crop production, and livestock production "tips" discussed in the workshop were used to compare weak management to superior management in all phases of the farm and ranch business. The differences in management savings totaled more than \$15,000 for the average sized farm in the state.

Seven workshops were held during this past year with average attendance of 170 farmers per meeting. The evaluations indicated a cross section of debt levels and sex in attendance. Over 90 percent of evaluation responses indicated that the material was relevant, timely, and useful.

Finally, the "Tips" workshop was designed more for large audiences rather than indepth workshops. Therefore, less individualized assistance is provided when using this approach. However, the two approaches complement each other, when both are available. The short course participants are encouraged to get specific indepth assistance in areas where they might need it. Indepth workshop participants use the short course for a refresher.

REFERENCES

- [1] Bolen, Kenneth R. and Leo E. Lucas. "Regaining Farm Profitability in America, A Cooperative Extension System Response." Prepared for the Extension Committee on Organization and Policy, Insititute of Agriculture and Natural Resources, University of Nebraska-Lincoln, Dec. 1984.
- [2] Brown, Thomas G. "Changing Delivery Systems for Agricultural Extension: The Extension Teacher-Changing Roles and Competencies." *Amer. J. Agr. Econ.* 63(1981): 853-858.
- [3] Hildreth, R. J. and Walter J. Armbruster. "Extension Program Delivery - Past, Present, and Future: An Overview." *Amer. J. Agr. Econ.* 63(1981): 853-858.
- [4] Tkerd John E. "The Changing Professional Role of the Extension Economist: Discussion." *Amer. J. Agr. Econ.* 64(1982): 886-8.
- [5] Schuh, Edward G. "Revitalizing the Land Grant University." Paper presented at Colloquium, Strategic Management Research Center, University of Minnesota, September 28, 1984.
- [6] USDA. "Cooperative Extension and Agricultural Profitability - Fighting Farm Financial Crisis On The Front Line." USDA - Extension Service survey. Feb. 1985.
- [7] Wallace, L.T. "The Changing Professional Role of the Extension Economist." *Amer. J. Agr. Econ.* 64(1982): 879-83.
- [8] Woeste, John T. "Future Directions of Extension Economics Programs." *Amer. J. Agr. Econ.* 64(1982): 874-78.
- [9] Wood, William W. "Future Directions of Extension Economics Programs: Discussion." *Amer. J. Agr. Econ.* 64(1982): 884-5.