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## Cooperative Extension Responding to Family Needs in Time of Drought and Water Shortage

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## Cooperative Extension Responding to Family Needs in Time of Drought and Water Shortage

### Abstract

This article examines the impact of drought on family relationships and how Extension has responded to the needs of farm, ranch, and rural families. Information was based on a literature review and interviews with farmers, ranchers, and professionals working with rural issues. Rural families who experience economic hardships have been found to suffer stress and relationship tensions. However, more research is needed to understand how families cope in drought conditions. Extension has responded to the drought issue using various delivery methods to gather and disseminate information to provide support to farmers, ranchers, and professionals working with rural families.

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## Introduction

U.S. Senator Ben Nelson, from Nebraska, named the drought "that has wreaked havoc on crops and livestock in much of Nebraska" as "Drought David" (Omaha World-Herald, 1/15/03). Because future support of Extension relies heavily on issues programming and how critical issues can be addressed effectively (Vitzthum, 1991), it has been essential to address the effects of the drought on farmers, ranchers, rural families, and their communities. This drought has affected a major part of the United States and has been classified as a severe to extreme throughout Nebraska. The purpose of this article is two-fold:

1. To identify what is known about couples and families going through economic hardship and drought.
2. To inform others about how to respond with a Family Sciences perspective to the impact of drought with examples from the University of Nebraska Cooperative Extension.

## Literature Review

Living in rural America is assumed to be positive and wholesome for family life; however, rural areas are increasingly falling behind in wealth, job opportunities, school adequacy, health care, transportation, water and sewage systems, shopping facilities, telecommunications networks, and overall well-being (Wells, 2002). Feeling loved, capable, and self-sufficient is critical to the well-being of individuals and families, whether urban or rural. The feelings of self-sufficiency and independence are also a part of rural tradition and appear to influence the well-being of farmers and ranchers. People in rural communities tend to adhere to patriarchal values where men are often considered major providers and major decision-makers (Saugeres, 2002), although this is changing because the majority of farm women work off the farm.

Farm income averaged about 50% of total family income in the 1980's (Lilley, 1988), but off-farm income has increased during the past decade in order to help support farming and ranching endeavors. It is now estimated that 75% of farm/ranch households have at least one partner who works off the farm. Farm women who have off-farm employment usually find low-paid, part-time

jobs in the service sector. Rural women may have less education and limited work skills, but their lower wages are primarily due to lower returns on human capital, inferior labor markets, and gender-segregated occupations (Wells, 2002). Although some partners may make minimal off-farm wages, these incomes provide for living expenses and therefore cause a potential imbalance of relationship power.

Changes in work and family structure have been occurring gradually during the past two decades. However, it is difficult to change the traditional patriarchal milieu to one where women and men have equal opportunities, women may choose to have careers off-farm, and couple/partner relationships are egalitarian. These cultural, environmental, and business hardships place stress on couple relationships and escalate the potential for conflict and/or partner abuse.

When conditions such as harsh weather and low commodity prices cause hardship on farmers and ranchers, individual, couple, and family well-being suffers. According to USDA and the Nebraska Department of Agriculture (2002), farmers and ranchers experienced stress due to multiple hardships although commodity prices increased slightly. During the 1980's, midwestern farmers experienced a tremendous loss of income and property (Jurich & Russell, 1987) and suffered chronic stress and depression.

Reframing the problem, trying to be positive when considering different solutions and possible outcomes, was a major coping strategy used by farm couples. Some farmers and ranchers coped with problems by having strong religious beliefs and were reluctant to accept help from professionals, neighbors, or relatives. They were confident in their ability to solve problems on their own (Light, 1990).

Educators who have worked with hundreds of farm and ranch families have indicated farmers and ranchers are more willing to seek assistance today than they were back in the 1980's and 1990's, although it is not an easy task to ask for help or access resources (Bosch, Griffin, Meek, & Rossman, 2002). According to Greg Ibauch, Nebraska Department of Agriculture, resources and some farm subsidy monies will be available to help farm and ranch families in Nebraska (2002).

Families who are losing their farms may receive little help from their neighbors due to victim blaming, where individuals are blamed for circumstances beyond their control. Farmers and ranchers may also fail to seek help due to farm community values involving pride and independence that influence farm families in crisis to pull back from neighbors (Wright & Rosenblatt, 1987).

Cook and Heppner (1997) found problem-solving appraisal and coping strategies to be important variables in the complex coping processes of Midwestern farmers engaged in major career transition. According to this study, intervention programs to aid farmers should be geared toward increasing farmers' sense of mastery, specifically problem-solving skills. They suggested that more research on farmers engaged in major career transition is needed to examine the consequences of farmers' coping skills on resolution of the problem, perseverance, and hopelessness (Cook & Heppner, 1997).

Researchers in the 1980's and 1990's found that Nebraska farm/ranch families suffered hardship under economic stress (Johnson, 1990; Ortega, 1994), and more than 40% of farm operators reported very high or high levels of stress (Lilley, 1988). Although farming, by nature, is a stressful occupation, the potential stressors have been elevated because of drought conditions.

The high evidence of stress and the consequences of these stressors, such as loss of self-esteem, leading to withdrawal from social and community activity, inhibition of adaptive responses, poor decision-making about financial and family matters, depression, and the breakdown of family relationships, led the Australian government to provide farm families with drought relief programs. These included such programs as a recovery guide, hot line, training to enhance skills of primary producers, farm debt mediation, and rural women's networks to provide information and resource links (Stayner & Barclay, 2002).

Although there are apparent similarities in stress responses caused by economic stress and stress caused by drought, more research is needed and is currently underway to help understand the impact of drought on farm and ranch families (Bosch & Griffin, 2004).

According to psychologist Mike Rossman (Bosch, Griffin, Meek, & Rossman, 2002), drought conditions are more long-term than a flood or pest that hits one crop or season, making drought more difficult on the overall health and well-being of individuals and families. Drought appears to be a great hardship on farm/ranch families and is causing them to make difficult decisions, such as whether or not to remain in farming. In many cases, the decision to quit farming is being made for them by their lending institutions. However, many individuals and couples remain hopeful that the drought will end in the near future.

One Nebraska farmer reported in an interview that the health of his wife, who had cancer, was more important to him than his crop of corn. Another well-established Nebraska farmer interviewed in the fall of 2002 stated that although he and his wife have cried together, they pray things will be OK. He was certain they will survive but is concerned that his son and daughter-in-law, the younger generation of farmers, may not financially survive farming through the drought. In January 2004, this two-generation farm family had a farm sale and were having to quit farming

to avoid further loss of assets or bankruptcy. The younger couple will move and find employment in a larger town; the 60-year old father will work for a local farmer.

When asked about how the drought is affecting their couple relationship, a Nebraska rancher said, "It's difficult; strained sometimes. I'm more of a communicator than he is, so there'll be times I have to draw it out of him, so it's difficult; it's strained! He's a quiet man and it's sometimes difficult without a drought! We just need to keep open-minded and work at communication" (Bosch et al., 2002).

According to Nebraska climatologist Al Dutcher and other specialists who have studied the weather patterns, it is speculated that drought conditions may continue for 1 to 3 years (Dutcher, 2002; Hu, 2003). During 2002 Nebraska suffered with less than average rainfall and was considered to be in severe to extreme drought. The Nebraska Panhandle had 50% less than average rainfall for 2002 with 6" total annual rainfall. Snowfall shortages in the mountains were expected the following winter and underground water levels were decreasing (Berens, Nebraska Office of Rural Health, 2002).

Creative and often costly strategies were used to continue farming and ranching during drought, such as to dig more wells, borrow irrigation waters against next year's allotment, change crop type and production systems, and sell livestock because of lack of feed. Because of decreasing water levels in the aquifer system, water shortage will be a reality even if rainfall is average in the coming years (Sibray, 2003). This is likely to be a long-term problem that will affect farmers and ranchers, rural communities, and policy-makers.

## **Cooperative Extension Programming 2002-2003**

Extension educators constantly struggle with the challenge of delivering programs that are effective, timely, and accessible to specific target audiences. Working with other Extension colleagues, collaborators, and clients was essential in delivering effective programming on this issue that reached audiences with research-based, client-driven educational information. Numerous contacts were made with key people who work with rural issues via teleconferences, personal visits, planning meetings, and interviews. The program, planned by collaborators within state and on multi-state teams with the lead of a Cooperative Extension Family Life Specialist, included the following components.

### **News Media**

In late spring of 2002, the shortage of rainfall was already being experienced by farmers and ranchers. Therefore, with assistance from Cooperative Extension administrators and communication specialists, nutrition, community development, and family life specialists teamed together to write news releases and radio programs distributed throughout Nebraska and Kansas. Interviews and article releases were in many papers such as the *Los Angeles Times*, *Omaha World Herald*, and *Salina Journal*, and on numerous radio stations including an hour-long program with Data Transmission Network and Market Journal.

Approximately 40 news articles were submitted to farm magazines widely read by the rural population, primarily written by a Cooperative Extension family life specialist. These news articles were then tailored for local use as needed by county educators for news releases via newspapers and radio. Family issues, specifically how drought affects families, were addressed from a holistic perspective, including physically, financially, emotionally, sexually, and spiritually. Topics included:

- Helping couples cope with stress;
- Communicating effectively;
- Managing conflict;
- Caring for self, spouse/partner, and family and friends;
- Health and wellness;
- Nutrition;
- Financial management;
- Reducing unnecessary expenditures; and
- Working effectively with lenders.

### **Fact Sheets**

Because farm and ranch couples were experiencing a great deal of stress, a rural issues council, the Nebraska Rural Response Hotline, and Cooperative Extension staff established a program priority focusing on strengthening couple relationships. Cooperative Extension fact sheets were written on various topics related to rural couples and farming with extended family, including:

- Making intimate relationships stronger,
- Communicating effectively,
- Parenting,
- Parenting through conflict,
- Managing the farm/business together, and
- Working with extended family.

## Classes

Depending on local needs, Cooperative Extension classes were offered as face-to-face, learn-at-home courses through the mail, or as Internet courses in the privacy of individuals' homes. The implementation of *CoupleTalk*, a personal relationship course designed to strengthen partner relationship by building skills emphasizing growth and behavioral change, developed by Kansas State University Extension Specialist Charlotte Shoup Olsen, is one example of multi-state programming involving the exchange of course material and co-teaching.

Because Cooperative Extension delivers educational programming rather than counseling or therapy, couple relationship education was offered to couples who were not in severe distress and wanted to strengthen skills and develop a support network. Referrals were made to appropriate mental health centers, the Nebraska Center for Conflict Resolution, the Nebraska Rural Response Hotline, and mediation services when deemed necessary.

## Multi-State "Weathering Tough Times" Satellite Conference and Community Meetings

The "Weathering Tough Times" satellite training was planned to respond to a critical need in regards to the drought and other hardships experienced by farm and ranch families and businesspersons depending on the rural economy. The objective was to provide training to update Extension Educators and other professionals who work directly with farmers and ranchers, such as bankers, farm credit services, medical staff, insurance representatives, clergy, and business managers of seed dealerships or grain elevators. The focus of the training was from an individual, partner, family, and community perspective and addressed topics such as:

- Behavioral and mental health;
- Stress management techniques;
- Strategies for responding to rural families in need;
- Managing financial responsibilities;
- Working effectively with lenders;
- Making appropriate referrals; and
- Helping farm and ranch families access community, state-wide, and national resources.

A team of Extension educators, specialists, administrators, and communication technologists from UNL worked in the initial planning, discussion, and implementation of the satellite conference. Within a matter of several weeks, they consulted with leading professionals in rural issues from Kansas State University and Iowa State University and began the plans for a multi-state effort. It quickly became apparent that this was not only a state or regional issue, but indeed a national concern, with 47 states experiencing a shortage of annual rainfall and 27 states experiencing severe drought. By this time, 50% of Nebraska was experiencing an extreme drought, occurring only once every 25-50 years; 20% of Nebraska was experiencing an exceptional drought, occurring only once every 50-100 years.

The planning team in all three states sought advice and support from various state-wide agencies, such as the Department of Agriculture, Rural Response Hotline, Rural Health, Health and Human Services, Center for Conflict Resolution, Mental Health Services, and public officials. In addition, advice and support materials were sought from other colleagues from various disciplines within the Extension system, such as family life education, nutrition and health, community development, agriculture economics, climatologists, hydrologists, technology and associated support staff. The training was downlinked by 14 states with 250 attendees. Ninety-four percent of participants returning evaluations (n=58) rated the satellite conference as good or excellent with relevance of topics to me; some that rated it lower indicated they were familiar with rural issues.

## Web Site, Internet, Video Tapes

A Web site was developed with information regarding the training and support materials used in the satellite conference. The program agenda and materials for the satellite conference were publicized and distributed solely through the World Wide Web and email technology. It is estimated that more than 200 people logged onto the Web site, many of whom facilitate larger groups. Besides Nebraska, Kansas, and Iowa, who cosponsored the conference, South Dakota, North Dakota, Ohio, Montana, Michigan, Colorado, and West Virginia were also involved in downlinking the conference and planned to conduct further staff trainings.

Information from the satellite training was available on the Web site the following day for public use at <[http://www.panhandle.unl.edu/tough\\_times](http://www.panhandle.unl.edu/tough_times)>. Lists of resources, video clips from farmers, ranchers and lenders' interviews, answers to questions asked, a certificate of attendance, and training evaluation were available on the Web site. Each Nebraska and Kansas county received a copy of the video tape for future use, and the satellite training was stream-lined live on the Internet for individual use. Some downlink sites held community response meetings that day. Since the satellite conference, numerous meetings have been implemented in communities throughout the states, specifically in Kansas and Nebraska, allowing the dissemination of information and facilitation of discussion on community needs. Maintaining an updated Web site is an ongoing project with help from communication specialists.

## Drought Seminars

Seminars, such as the *Panhandle Research and Extension Field Day: An Emphasis On Drought Issues* and the *Drought Facts and Strategies Conference* dealt with both agricultural and family issues. Planning teams cooperated to provide educational programs addressing water supply issues, water irrigation and conservation, range management, alternative crops, and livestock management, and also addressed family issues, such as couple relationships, self-care, family well-being, financial management, health, and nutrition. Seminars and workshops targeted various audiences, such as public officials, service agencies, and urban communities to assist them in understanding the impact of drought on rural families and implications for urban residents. In addition, seminars have been held for farmers, ranchers, and business persons depending on the rural economy. It is estimated that these seminars reached 1,500 Nebraskans.

## Community Fund Raiser

The Nebraska Panhandle Mental Health Center knew of individuals who were suffering depression and other symptoms most likely complicated because of severe drought conditions. To show their support for rural families, they sponsored a fund raiser with assistance from many local businesses, community leaders, educators, and service providers. This event raised over \$10,000 for the Rural Response Hotline to provide farm and ranch families vouchers for mental health counseling. There were other fund raisers in other locations to raise money for vouchers.

## Research Plans

Although much research has been conducted on economic hardship during the 1980's and 1990's, little research was found that identified how families respond to drought. Plans are underway to conduct face-to-face interviews with farmers and ranchers in several Midwestern states under severe/extreme drought conditions.

More research is needed to determine the impact of drought on couple and family relationships and how individuals, couples, and families respond to the stressors associated with drought. It is from first-hand experiences of individuals and families experiencing stress, coping, and change, that researchers and educators often learn the most. Understanding how families respond to drought will likely help professionals and lay helpers deliver more effective education and services as they work directly with farmers, ranchers, and rural communities. The results of these studies may be used as a basis for future programming efforts and grant funding.

## Conclusion

Impact is difficult to measure with one-time events, but evaluations from training sessions and personal reports indicate that the seminars, fact sheets, and other research-based information helped individuals learn more about issues and how to access resources. Telephone calls and requests for assistance continue from distressed farmers, ranchers, and rural businesspersons. With expected shortages of snowfall and rain, and decreasing levels of water in the surface and aquifer systems, drought problems are likely to extend into next year throughout much of the nation.

At some point the drought will end. However, a shortage of underground waters will remain in many areas that may continue for years. Examining the impact of drought on families continues to be a critical issue that needs further attention by Extension and other helping professionals. The quality of life for rural America will be enhanced by understanding the needs of rural families and how Extension and service professionals can effectively respond to meet those needs.

For detailed information on particular seminars, courses or fact sheets, please contact the author, Kathy Bosch, Extension Specialist, Family Life Education, University of Nebraska at [kbosch2@unl.edu](mailto:kbosch2@unl.edu) or 308-632-1244.

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