

# AGRICULTURAL EXTENSION SERVICE FACT SHEET

The Agricultural Extension Service of the University of Minnesota provides educational programs and information to people of all ages throughout the state, in cooperation with the 87 counties in Minnesota. These programs focus on current and future problems and needs in four areas: agriculture, home economics, 4-H, and community and natural resource development. The goal is to improve the economic well-being and quality of life for individuals and families in Minnesota.

## EXTENSION = PROGRAMS + PEOPLE

**Program development.** Programs are developed by extension staff in cooperation with citizen advisory groups and volunteers. Continuing assessment and analysis of the needs of the people insure that the programs remain relevant to current and future issues. Research conducted by scientists at the Agricultural Experiment Station provides the basic information for much of extension's educational program.

**Program delivery.** Information and training are provided to the people of Minnesota in many different ways—classes, meetings, seminars, workshops, one-to-one consultations, radio, television, newspapers, telephone, publications, fact sheets, and computers. The people who take part in extension programs include farmers, homemakers, business people, children, government officials, families, community leaders, retirees, teenagers—in other words, people of all ages, interests, and walks of life.

**Volunteers.** Volunteers play an extremely important role in planning and delivering extension education programs. In 1983 more than 50,000 people were actively involved as volunteers. The major programs using volunteers are 4-H, Extension Home Study Group members, and Extension Master Gardeners. These volunteers serve in many capacities but most often as extension-trained teachers. They receive training from county agents, specialists, or community resource people and, in turn, transmit their knowledge and skills to others, thus immeasurably expanding the scope of extension programs. Based on a conservative estimate of \$3.35 an hour, the contribution of volunteers to the Agricultural Extension Service in 1983 was worth about \$6,500,000. At the same time that they are contributing to extension, they are also receiving its benefits—their training and personal satisfaction result in considerable growth on the part of the volunteers themselves.

## AUTHORIZATION

Congress, with the 1914 Smith-Lever Act, established the Cooperative Extension Service as the arm of the land-grant college system to provide educational programs for persons not enrolled as regular students in a land-grant college.

Even earlier, in 1909, the Minnesota Legislature authorized extension work to be carried out by the University of Minnesota. Subsequent legislation provided for a County Extension Committee to be a partner with the university in hiring extension agents and approving the annual plan for extension educational programs in each county.

## FUNDING

**Federal funds** are appropriated and distributed to states in two ways. They are either distributed among the states on the basis of a formula for use with any extension program, or earmarked to meet special needs of national concern.

**State funds** are appropriated on a biennial basis by the legislature as a special line item in the University of Minnesota budget.

**County funds** are appropriated by the County Board of Commissioners, in accordance with Minnesota statutes, based on the recommendation of the County Extension Committee.

**Non-tax funds** include fees, gifts by individuals, and grants from business and industry. Individuals, organizations, and businesses may make tax-deductible gifts to the Agricultural Extension Service through the University of Minnesota Foundation or the Minnesota 4-H Foundation.

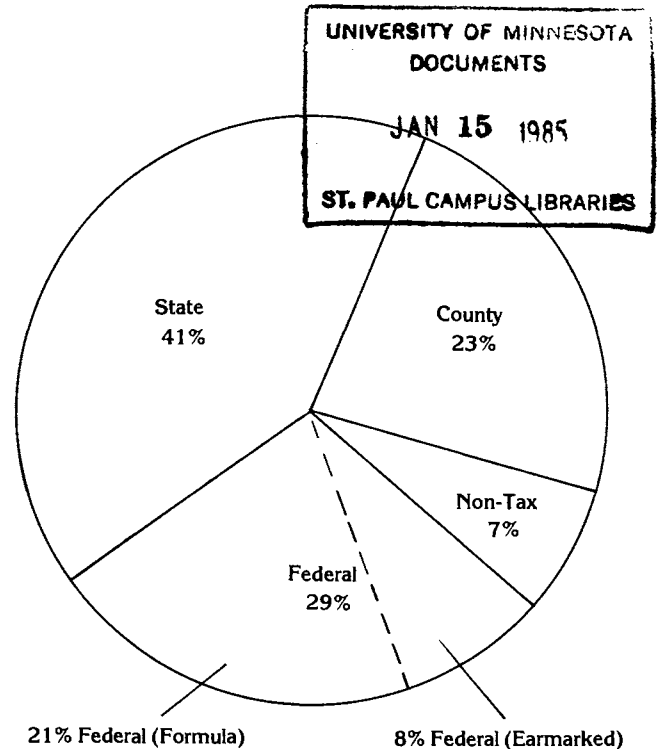


Figure 1. Source of funds, 1983-84.

In 1983-84, the total revenue from all sources was approximately \$27,922,660. More than 90 percent of the total budget is used for professional and support staff. Staff resources of the Agricultural Extension Service are distributed among the four major program areas by the approximate percentages indicated in figure 2.

This archival publication may not reflect current scientific knowledge or recommendations.  
Current information available from University of Minnesota Extension: <http://www.extension.umn.edu>.

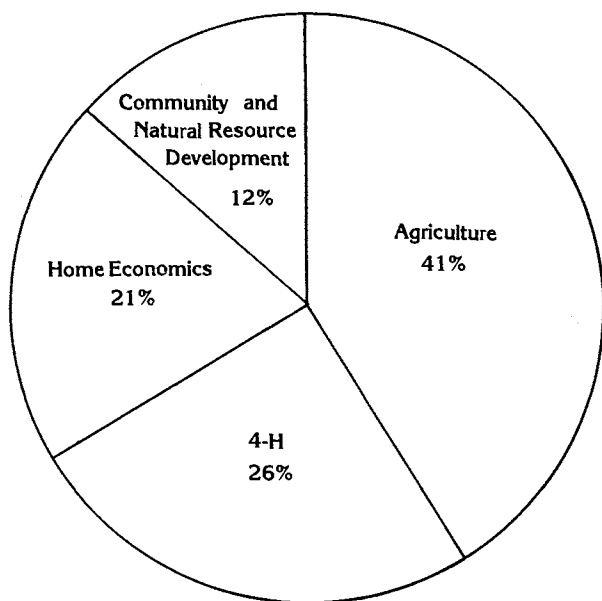


Figure 2. Distribution of staff resources, 1983-84.

## EXAMPLES OF PROGRAM ACTIVITIES

**Conservation Tillage.** Through this important new concept in soil erosion control, extension's cooperative effort with the Soil Conservation Service and others is already getting good results. Four major applied research demonstration sites across the state have been established to train other agency personnel and farmers. A fifth site in southeastern Minnesota is supported by the Soil Conservation Service to educate its field staff. Educational tours of these plots have convinced people of the value of conservation tillage. In the spring of 1984 a survey of 131 randomly selected farmers showed that in one year use of conservation tillage on corn went from 3% to 13%, and for soybeans from 9% up to 11%. As a result, 7,210 farmers now practice conservation tillage in the southeast sector of the state alone.

**Living Resourcefully.** How do you maintain a feeling of security and well-being in a time of declining resources and rapid environmental change? This is the challenge individuals and families are now facing. To meet this need, extension home economists have developed an integrated program to teach people how to stretch the resources they have and identify ways to increase and improve their resources. Financial management, using community resources, increasing home production, coping with stress, and planning ahead for changing needs are some of the subjects being taught.

**4-H Mediation Project.** During 1983-84, Minnesota 4-H piloted the first national rural mediation program for youth and families in Cottonwood, Crow Wing, Otter Tail, Stearns, and Wright counties. The project provides both an educational experience in constructive conflict resolution and a preventive means for people to tackle problems before they become unmanageable. Mediation helps persons and families find their own solutions to problems within a nonadversarial, nonpunishing, and nonblaming framework. It promotes self-sufficiency and self-determination, assuring a role and voice for young people in decisions affecting them.

### 4-H Facts and Figures

Total 4-H contacts in 1984 involved 139,699 youth, 18.5% of the available Minnesota youth ages 9-19. Of these, 40,423 were enrolled in 1,893 4-H community clubs. An additional 99,276 participated in educational program offerings, including nearly 82,000 youth enrolled in 4-H bicycle safety programs, making Minnesota a national leader in promoting bicycle safety.

4-H contacts by place of residence :	Number	Percent
Farms	25,018	17.9%
Rural and towns under 10,000	17,143	12.2%
Cities 10,000 to 50,000	41,991	30.0%
Cities over 50,000 (suburbs)	13,880	9.9%
Central cities over 50,000	41,667	29.8%

Since its establishment in 1980-81, the Minnesota 4-H Foundation has recruited over 8,500 new donors and generated new gifts and pledges for total donor support of nearly \$430,000.

**Opportunity Farm Program.** Over the years extension has worked with farm operations of all sizes. But in Wadena and Hubbard counties, in north-central Minnesota, a special project has been conducted with small-scale farms in the Opportunity Farm Program. Begun in 1975 with a grant from the Governor's Rural Development Council, the program uses aides who take information from the county extension office to individual farmers. The project deals with tractor and machinery repair/maintenance, livestock production, crop production, and farm financial planning. As a result of the program, over 40% of the farmers improved timeliness of planting and harvesting; dairy production increases averaged 2,646 pounds of milk per cow on half of the herds enrolled; and yields increased 3 tons per acre on corn silage, 1-1/2 tons per acre on hay, and 30 bushels per acre on oats. Income increases range from \$1,500 to \$20,000 per farm, averaging \$8,200 annually.

**EFNEP.** Families with low incomes are finding it even more difficult to stretch their food dollars. Through EFNEP (Expanded Food and Nutrition Education Program) many families are learning how to obtain good nutrition on a limited budget. Through small-group or one-to-one instructions, EFNEP program assistants teach and demonstrate principles of good nutrition and food budgeting. The EFNEP program assistants are trained and supervised by extension home economists.

**Seminars on Agricultural Policy.** Nearly 3,600 people have attended extension seminars on agricultural policy and public affairs since they were begun in 1978. The seminars deal with subjects such as the effect of interest rates, foreign loans, and deficits on farm credit and prices; agriculture and foreign policy; and rural freight transportation policy issues. In addition to farmers and farm organizations, participants have included representatives of financial institutions; business and industry; foreign countries; local, state, and federal government; and public interest groups. In 1985 the program will focus on new farm legislation.

**Minnesota Sawmill Project.** Sawmill operators and loggers in the Park Rapids area are learning how to become more efficient with the help of the Minnesota Sawmill Project. Technical assistance provided by extension has helped small operators produce lumber that is more uniform in size and has shown them how to save on timber costs and conserve timber resources.

**Minnesota, the Land of 10,000 Lakes.** Minnesota's lakes (in reality there are closer to 14,000) contribute greatly to the economic and esthetic base of the state. Acid rain, water diversion, nonpoint source pollution, eutrophication, and recreational uses are some of the areas where problems confront this great water resource. Through Sea Grant programs and other efforts, often in cooperation with other departments and agencies, extension is placing a higher priority on water resources programs.

**4-Hers Learn Through Animal Projects.** Over 25,000 Minnesota youth between ages 9 and 19, supported by 2,750 adult volunteer leaders, currently participate in one or more 4-H animal projects. Through learn-by-doing experiences members explore future career opportunities, develop management skills, and achieve the self-confidence necessary to become contributing members of society. In addition to growing as individuals, members raised and marketed in excess of 4.8 million pounds of animal products during the past year. New program thrusts include creating programs to enhance urban understanding of the animal industry in Minnesota.

#### Extension Helps People Save Money

Improved chemical weed control practices have helped farmers increase their returns on major agronomic crops by more than \$400 million a year and have saved an estimated 9 to 10 million gallons of fuel. A major factor in this saving is extension training of county agents and industry representatives.

Families using an extension calculator/computer program to identify ways to save on water heating costs have reported an average savings of \$90 to \$100 a year.

Adoption of the mastitis control project, monitored through Dairy Herd Improvement (DHI) records, could increase yearly milk income by over \$35 million, and add value of dairy calves by over \$14 million.

Many turkey producers in the state have adopted extension's management and disease control programs, saving more than \$8 million in production costs.

**Crop Pest Management.** Minnesota had a potentially severe outbreak of army worm and corn borer infestations in 1984. Insect pest management activities were coordinated by specialists, two area agents, county agents, crop consultants, and pesticide industry employees, who collaborated to monitor development of the pest populations. In all, 150 scouts and consultants, 2100 chemical applicators and dealers, and 1700 growers were taught about the insects and economical control procedures. Timely and effective control of the army worm outbreaks on 575,000 acres saved growers \$20.6 million. Educational activities on corn borer control improved pest management decisions on 10% of the 7 million corn acres and resulted in saving \$11.2 million by reducing losses and unnecessary insecticide expenditures.

**Teaching the Unemployed How to Manage.** Widespread unemployment on Minnesota's Iron Range has had both an economic and psychological impact on families. The Agricultural Extension Service has mobilized to provide educational information to assist unemployed and low-income families. Specialists in nutrition, financial management, clothing, energy, housing, and family life are providing information and counseling for individuals, families, and

groups, and are training community leaders and volunteers. Extension is also helping to develop a long-range plan to enlarge the economic base of the area with a focus on energy, forestry, farming, fisheries, and tourism—the Northeast Thrust.

#### Providing Alternative Educational Delivery Systems

During 1983-84, the Agricultural Extension Service has made a vigorous attempt to develop newer and less costly ways to deliver education to the public. Innovative projects are being developed, all focused on reducing future costs. Some samples of these projects:

- \* Establishment of a Center for Farm Financial Management to provide educational programs and information.
- \* Use of computers to process and store Cooperative Agricultural Weather Advisory Program data.
- \* Videodisc—a pilot project to place 600 extension slide sets and other educational images onto videodisc in each county office to allow easy access to available slides and to build a library of visuals for other educational purposes.
- \* A computer program to estimate soil loss and suggest ways to reduce soil erosion.
- \* Teletip—a free telephone information service offering brief yet detailed information on hundreds of subjects in answer to everyday questions. Based on the university's St. Paul campus, Teletip served over 10,000 callers over the summer through taped messages and referrals to other university departments and DIAL-U. More than 200 informational tapes are available, with 200 more planned for 1984-85.
- \* A computer program for determining safe processes for home canning and processing of food.
- \* Project EXTEND—a statewide network of small computers and computer terminals connecting nearly all county and area extension offices directly with the university. Businesses and individuals owning home computers can also connect directly with the system. Educational software is now being developed in farm financial analysis, marketing, livestock and crop production, human nutrition, stress management, and many other areas.
- \* A new forage testing program, Near-Infrared (NIR) Analysis, is developing technology for fast analysis of nutrient content in forages to help balance rations. A mobile van equipped with NIR testing equipment allows for area-wide demonstrations on individual farms across the state.

**Farm Financial Management.** Financial stress is at a crisis level on many Minnesota farms. Extension is helping farmers make economic analyses of their farm businesses and return their farm operations to a healthy financial state. Farmers from all farm sizes are asking extension for help in learning how to survive financially. Agricultural credit agencies also are seeking educational assistance from extension for themselves and their clientele.

**Project Support.** Extension is responding to the changing farm economic and social conditions with an expanded, high priority program in farm family financial planning and family stress management called Project Support. This large-scale educational effort includes meetings throughout the state, an increase in one-on-one contacts for individual economic analysis assistance, community networking to address the stressful situations brought about by these changes, and stress management within the family.



**Forage Production.** Extension programs to improve forage production have been prominent in many counties in northeastern and southeastern Minnesota. An educational effort, begun in 1982 with an Alfalfa Growers Program, determines yield and quality of alfalfa produced by Minnesota farmers. County extension agents measure yields, obtain forage quality tests, and make feeding recommendations. In 1984, 163 fields in 50 counties were enrolled in the program, which provides real leadership to improving income for producers of Minnesota's most important perennial forage crop.

### Extension Reaches People

In 1983 there were 40,354 members in 2,986 extension home study groups, and 413,472 people attended programs, workshops, and conferences sponsored by home economics. County and state extension home economists *each* averaged nearly 38,000 audience contact hours a year. Over 27,000 volunteers assisted with home economics program area educational activities.

Agricultural outlook information prepared by extension reached 130,000 farmers through an insert in *The Farmer* magazine. Outlook information was also distributed through radio, television, newspapers, and meetings, reaching thousands more. This outreach effort provides access to information helping farmers to take advantage of short-term pricing opportunities and to develop long-term marketing strategies.

Thousands of Minnesota youngsters are learning about future careers in agriculture and related fields through a variety of 4-H projects. Some 25,000 boys and girls are enrolled annually in over 42,000 animal science projects, and more than 18,000 participate in activities related to plant science. Additionally, over 52,000 4-Hers are enrolled in mechanical science projects, nearly 24,000 participate in citizenship/community activities, and 41,000 are involved in individual and family projects.

The DIAL-U Insect and Plant Information Clinic, a fee-based service, provides accurate and unbiased information and advice on common home, garden, yard, and insect questions from trained personnel. Since beginning in 1982, DIAL-U has reached over 31,000 Minnesotans, with continued growth projected as awareness of the service builds.

During 1983-84\* extension county agents reached over two million Minnesotans through direct contact (telephone, letters, individual office or home visits, and extension meetings). Approximately another 50,000 persons were reached through the media and through contacts in area offices and coordinate campuses of the university.

\*Between April 1983 and March 1984 a random statistical survey was conducted quarterly to better identify the characteristics of Extension clientele.

**MAENA.** Minnesota Agricultural Enterprise for New Americans is a unique three-year project (May 1983-December 1985) designed to help Southeast Asian refugees in the Minneapolis-St. Paul area become self-supporting through specialty vegetable crop production, processing, and marketing. MAENA is both a training project and a business enterprise, preparing its students for potential jobs. If successful, by 1986 up to 50 Southeast Asian families, most too unskilled to find other employment, will leave public assistance rolls to own, operate, and manage an independently functioning cooperative agricultural enterprise. Funding support for MAENA comes from county, state, regional, and national welfare and resettlement agencies; private foundations; and contributions.

**The Future of Minnesota's Forests.** The Agricultural Extension Service took an active part in helping the state legislature draft the Minnesota Forest Resource Management Act, which became law in 1982. The goal of the legislation is to improve forest management, including planning, to insure that vital forest resources will remain for future generations. Extension's contribution included evaluating alternatives and making recommendations to the special legislative committee considering the long-range state forestry program.

**Master Gardener Program.** Over 500 volunteers have been trained to be resource people for home horticulturists. These volunteers, called Master Gardeners, receive in-depth training from the Agricultural Extension Service on a wide variety of horticultural topics. This core of volunteers then assists other gardeners by providing information on topics such as fruit and vegetable production, vegetable gardening, lawn care, ornamental plant materials, floriculture, and landscaping. The program has reached homeowners throughout the metropolitan and rural areas of the state.

**Minnesota's Milk Diversion Program.** When the national dairy compromise legislation was signed into law, Minnesota's extension agricultural agents were ready to go with an educational program to help farmers understand their participation options. Use of computer programs to make economic evaluations of the farmers' options produced dramatic results. Although only 12% of all producers in the United States elected to participate in the dairy program, the participation rate in Minnesota was 22%. Extension's educational effort coupled with the current strong domestic milk purchases is helping to bring milk supply and demand back into better balance.

**Time Management Seminars.** Finding the time to get everything done is a problem of modern life. In 1972, a request by county extension agents for help in managing their time resulted in the development of a time management course by an extension faculty member that has now reached more than 30,000 people. Many groups, public and private, have attended the Time Management Seminars, and the course has been aired on public and cable television in all 50 states, Canada, and overseas.

**Minnesota Community Improvement Program.** As part of the Governor's Quality Environment Project, Extension has helped provide leadership to the Minnesota Community Improvement Program. This program helps participants recognize and develop their communities' resources. Last year over 25 communities participated in developing community-wide goals and setting priorities in a manner that allows ownership for the efforts to remain with the people. As a result, communication within the communities has been improved, attitudes of citizens about their communities are more positive, and public officials have a better idea of their constituents' priorities.

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