

**Montana State University
Extension Service**

**2001 Accountability
and
Results Report**

Index

| | |
|--|-----------|
| Introduction/Signature Page | 3 |
| Goal 1..... | 5 |
| Goal 2..... | 12 |
| Goal 3..... | 16 |
| Goal 4..... | 19 |
| Goal 5..... | 25 |
| Stakeholder Input Process..... | 34 |
| (Includes Listening Circles, Civil rights Review, Asset Mapping and Under-Served) | |
| Merit Review Process | 38 |
| Evaluation of Success of Multistate Extension Activities | 39 |
| Integrated Research and Extension Activities..... | 40 |
| Management Goals..... | 41 |
| (Includes Information Technologies and Enhancing Customer Service/Satisfaction) | |
| Institutional Engagement..... | 44 |
| Revision to 5 Year Plan of Work..... | 45 |

Introduction

“No single element distinguishes the land-grant university so much as the commitment to take its expertise and its programs to the far corners of the state. It is the objective of Montana State University, through the now combined activities of its four campuses and service arms, to expand the mission of the Extension Service to serve as a conduit to the educational needs of the state’s citizens with an increased variety of programming initiatives.”

MSU Report to Board of Regents
January 28, 1999

The above statement provides a clear direction for the Extension Service in Montana for the next few years. Our basic mission remains the same: to disseminate and encourage the application of research-generated knowledge to individuals, families and communities in order to improve agriculture, forestry, and other businesses, and strengthen Montana’s families and communities. What is different is the commitment to utilize all appropriate educational and research resources in Montana and the region through the Extension network to meet the educational needs of Montanans.

This new direction is underscored by expanded partnerships with MSU-Bozeman colleges, MSU-Northern, MSU-Billings, the MSU College of Technology, Rocky Mountain College, the seven 1994 Land Grant tribal colleges, tribal governments, the University of Montana, and other state, federal, and private institutions in Montana and the Rocky Mountain Region. We are exploring the possibility of locating Extension specialists around the state, rather than on campus, and we are considering regional field faculty positions.


A current and on-going example of innovative, futuristic partnership is the Montana Beef Network project that involves both the Montana Stockgrowers Association and the MSU Extension Service. Other examples of creative approaches to citizen education are MSU Extension’s small landowner program, the rapid and extensive response to fire and drought conditions in our state, and the refocused efforts to address the sagging agricultural economy and its effects on rural communities.

Our Extension Information Systems Support office has developed a state-of-the-art on-line accountability and reporting system that, when coordinated with our outcome-based program planning model, will greatly enhance our abilities to report social, environmental and economic outcomes to local, state and federal partners starting with the 2002 reporting cycle.

This report addresses many of the challenges the MSU Extension Service will face in the next three to five years to address the primary concerns and needs of Montanans. The focus areas include agricultural sustainability and profitability, family issues, youth development, economic development, growth management, and natural resources and the environment.

The MSU Extension Service is implementing an eight -point plan that resulted from an extensive review completed last spring. The review confirmed that the Extension Service is fulfilling its role as the primary vehicle for carrying the knowledge of MSU to all parts of Montana. The review efforts resulted in several recommendations for improvement that were taken under consideration by a working group composed of Extension faculty, University faculty and stakeholders. The group then developed eight recommendations which were enthusiastically approved by MSU President Geoff Gamble. Among the recommendations are development of:

- A communications plan
- A campus- wide Extension coordinating committee
- A University- wide center for youth development, and
- A program planning system that would include Extension, education and research faculty on issue- based planning teams

 I feel confident that this increased emphasis on program planning will help us to collaborate more effectively with researchers from the Ag Research Centers and with campus faculty. This extensive localized planning will ultimately improve our delivery of knowledge and research to the people of Montana.

David A. Bryant
Vice Provost and Director

February 2002

Goal 1: An Agricultural System that is Highly Competitive in the Global Economy

Overview:

Montana Farms and Ranches will sustain profitability and maintain land stewardship at a level that provides continued production and a desirable quality of life.. To address this concern, the Extension Service in Montana has implemented programs under the following Key Themes; Adding Value to Ag Products, Agricultural Financial Management, Ag Pro fitability, Plant Production Efficiency, and Range and Pasture Management.

2056 field faculty days were devoted to developing, implementing and evaluating these programs. Eight FTE of Specialist time was devoted to this goal. Faculty are on a combinati on of Federal Smith/Lever 3b&c, State and County funding sources. A total of 36,860 people completed the programs, and 23,463 actually adopted practice. Of those completing the programs, 968 were American Indian, 468 were Hispanic Ethnicity , and 89 were of other minority races. The American India participation is 2.6% of the total number of participants in Goal 1 programs. This number does not include the numbers of American Indians participating in Extension Programs served by our 5 EIRP agents on five of the seven Reservations in Montana. When we include those numbers we are over parity of participation on Goal 1 programs.

Selected impacts/Outcomes are:

- The Beef Quality assurance program certified 391 producer with 38,000 calves last year. That number has grown to 500 producers this year. Total calves certified was not available but if the average of 97 calves per producer remains the same, then 48,500 calves were certified. Calves were tracked through the market and sale price for certified calves was compared to non certified calves and a \$1.50 per hundred weight advantage was observed for Certified calves. Assuming an average weight of 600, this would be a \$437,400. benefit to 500 cow/calf producers or a \$875. average net profit increase to each producer that was certified. The additional profits to the feeders who will slaughter these animals was not estimated but would be substantial.
- The Noxious Weed Seed Free Hay program is delivered in 10 counties with 12,000 tons of hay being certified. Growers receive about \$15.00 per ton premium thus realizing a \$180,000 return in additional income.
- Three hundred twenty-five sheep producers were involved in sheep and wool production and marketing programs with 215 producers adopting new recommended production and marketing

practices. Many of the smaller producers are involved in wool marketing pools where they receive the advantage of volume marketing where the buyer can offer a better price for a car load or a semi load of wool.

- Agent assisted several producers learn how to balance the rations of their livestock. This fall one producer reported saving \$1,100 dollars on a high cost supplement that he had planned to buy, but discovered wasn't needed to balance the ration. Another producer reported better gains in his bull calves compared to last year when his ration was not meeting the energy and nutrient requirements for the gain he was seeking. Yet another producer went from a cost of \$1.32 per head per day to a cost of \$0.89 per day for a balanced ration on his 400 cow herd, saving him \$15,480 on his annual feed bill.
- Participants in a statewide dairy program were given management tools to increase the efficiency and profitability of their dairy operations. Three dairies reported saving up to \$1,000 per month by balancing rations utilizing home grown feeds. One dairy reported increasing their herd milk production by 25 lbs of milk/head/month by upgrading the ir ration to balance with the level of production potential. For this 200 head dairy that translates into an additional \$65,000. in cash receipts per month.
- The Noxious Weed Seed Free Hay program is delivered in 10 counties with 12,000 tons of hay being certified. Growers receive about \$15.00 per ton premium thus realizing a \$180,000 return in additional income.
- Producers learned the effects of extending the grazing season using a fixed resource base and how that might impact on breeding dates and weaning dates. They learned how to more efficiently manage alfalfa production as a component of their winter forage base. Surveys showed that as a result of these workshops, producers reported the management information and practices presented would increase their economic returns by as much as \$5,000 each. The total economic returns estimated by over 200 producers was about \$500,000.
- The State's assessment is that we have made good progress towards our five year goals in most areas and exceeded expectations in some areas. We have made an excellent impact in our first and second years of the new thrust Beef Quality Assurance program. Stakeholder input was a key factor in the identification of this new thrust.

Goal 1:

Key Theme: Ag Profitability

Brief Description:

Montana producers faced many challenges during 2001, one of which was severe drought and fires. When faced with these conditions, it is even more important for Agricultural producers to have considerable expertise in three major areas, production agriculture, financial management and marketing.

To aid producers with marketing grains and livestock, Extension Agents are working with Marketing clubs and are conducting comprehensive educational programs.

Impact/Accomplishments:

This information was widely used by farmers, ranchers.

Some examples of outcomes are:

- Of the 17 producers who attended the class, 5 have initiated marketing techniques including contracting with a broker. One producer shared that he has made an additional \$2,500 because of marketing skills learned in the class.
- Producers learned that using marketing techniques is not always about maximizing income, that sometimes it is about reducing risk or minimizing losses. Understanding the markets and having a good understanding of marketing strategy is more about staying in business over the long haul.
- Participants learned specific strategies that will help minimize calf mortality and increase subsequent conception rates. 18 producers either owned or managed 2,100 mother cows. Several of the producers reported a reduction of 2% or more in calf mortality that would result in an additional 42 calves in the fall.. At a value of \$500 dollars per head the net additional earnings is \$21,000
- Drought conditions in the county resulted in a sever reduction in available forage. To compensate, many producers turned to grain hay and other annual forage crops. The annual forage crops were also stressed by drought conditions resulting in lethal levels of nitrates. The agent worked with 32 producers. Harvesting or pasture use of forages testing high in nitrates was delayed. Harvested forages were mixed with other feeds at the recommended level to avoid toxic levels. The dollars save from animals that didn't die is difficult to estimate, but rest assured that many animals and dollars were saved.
- Agent assisted several producers learn how to balance the rations of their livestock. This fall one producer reported saving \$1,100 dollars on a high cost supplement that he had planned to buy, but discovered wasn't needed to balance the ration. Another producer reported better gains in his bull calves compared to last year when his ration was not meeting the energy and nutrient requirements for the gain he was seeking. Yet another producer went from a cost of \$1.32 pre head per day to a cost of \$0.89 per day for a balanced ration on his 400 cow herd, saving him \$15,480 on his annual feed bill.
- Seventeen agricultural operations utilized a ration balancing computer program available from the Extension office. One producer reported that he had saved about \$15,000 on winter feed costs due to knowledge gained from the use of the computer program and the efficient use of available forages. The other sixteen operations reported a combined savings on winter feed costs in excess of \$100,000.
- Participants in a statewide dairy program were given management tools to increase the efficiency and profitability of their dairy operations. Three dairies reported saving up to \$1,000 per month by balancing rations utilizing home grown feeds. One dairy reported increasing their herd milk production by 25 lbs of milk/head/month by upgrading their ration to balance with the level of production potential. For this 200 head dairy that translates into an additional \$65,000. in cash receipts per month.

Source of Funding:

State, federal 3b - 3c, and local

Scope of Impact:

State specific

Goal 1**Key Theme: Adding Value to New and Old Ag Products****Brief Description:**

Montana producers add value to products by certifying hay to be free of noxious weeds, by pooling Wool into graded, large volume lots through the pooling of small pools, by labeling and direct marketing of products, by producing for specialized markets, by packaging ag products efficiently,

Impacts/Accomplishments:

- The Noxious Weed Seed Free Hay program is delivered in 10 counties with 12,000 tons of hay being certified. Growers receive about \$15.00 per ton premium thus realizing a \$180,000 return in additional income.
- Three hundred twenty-five sheep producers were involved in sheep and wool production and marketing programs with 215 producers adopting new recommended production and marketing practices. Many of the smaller producers are involved in wool marketing pools where they receive the advantage of volume marketing where the buyer can offer a better price for a car load or a semi load of wool.
- The Consolidated Wool Pool Program will consolidate 8 smaller pools. 200,000 lbs of wool has been consigned for May delivery. It is expected that the consolidation of grade lots will yield a \$.05 per pound advantage and that would return an additional \$10,000. to the growers.
- A low interest loan was secured through the Montana Department of Agriculture to purchase a square bale wool bagger. There is a \$.50 per head premium for fleeces packaged in square bales. 2,000 head are scheduled with potential for another 6,000. The use of this technique could yield the producers with-in a 50 mile radius an additional \$4,000. In profit.

Similar impacts from Extension programs related to adding value to ag products are occurring all over the state. We do not yet have the capability to quantify state level impacts but plans are underway to have that capability soon

Source of Funding:

Federal 3b - 3c, State, and Local

Scope of Impact:

State specific using individual county data as examples

Goal 1:

Key Theme: Adding value through Beef Quality Assurance

Brief Description:

The Montana Beef Network has three primary objectives; 1) educational programs aimed at meeting beef quality assurance (BQA) standards, production and marketing goals and providing additional educational programs through interactive - video conferencing; 2) certification of feeder calves that have met defined health management protocols; and 3) information feedback from the feedlot and packing plant to the cow-calf producer showing if the feeder calves met industry requirements for quality, consistency, safety and red meat yield.

Impact/Accomplishments:

- The Beef Quality assurance program certified 391 producer with 38,000 calves last year. That number has grown to 500 producers this year. Total calves certified was not available but if the average of 97 calves per producer remains the same, then 48,500 calves were certified. Calves were tracked through the market and sale price for certified calves was compared to non certified calves and a \$1.50 per hundred weight advantage was observed for Certified calves. Assuming an average weight of 600, this would be a \$437,400. benefit to 500 cow/calf producers or a \$875. average net profit increase to each producer that was certified. The additional profits to the feeders who will slaughter these animals was not estimated but would be substantial.

Source of Funding:

SmithLever 3b&c
State
Local
Grant

Scope of Impact:

State specific

Goal 1

Key Theme: Plant Production Efficiency/Cropping Systems

Brief Description:

Extension specialist has developed and routinely updates an extensive agriculture resource information base which is globally accessible and electronically disseminated to approximately 63,000 subscribers weekly. Primary focus of the information service is enhanced agricultural crop production efficiency. Agronomy Notes (a legally registered copyright/trademark of Montana State University, located at <http://agronomy.org>) currently consists of 300 technically based agricultural crop production fact sheets, indexed, updated weekly, categorized and publicly accessible. Information from the fact sheet series is used to support and enhance a 3-hour county-based cropping systems training program, which is conducted in approximately 20 counties per year.

Impact/Accomplishments:

Overall program evaluation by recipients of Agronomy Notes is "good to excellent".

Two case examples from two of our 54 county and 4 reservation Extension programs follow:

- Six producers learned methods to reduce germination in dryland crop ground. By making minor adjustments in air drill openers, these producers decreased their wild oats populations and increase their profits by \$30. per acre. The average producer in this county farms 2500 acres. If only 100 of those acres were infested with wild oats, then each producer could net \$3000 from this practice.
- 10 producers adopted a new recommended practice for establishing alfalfa stands and applied the new practice to 1,700 acres. The benefit to them was estimated at \$51,000.

Similar impacts from Extension programs related to plant production efficiency are occurring all over the state. We do not yet have the capability to quantify state level impacts but plans are underway to have that capability soon.

Source of Funding:

Smith Lever 3b&c
State
Local

Scope of Impact:

Generally statewide, but primarily focused on agricultural production areas within Montana east of the Continental Divide; both dryland and irrigated crop production.

Goal 1

Key Theme: Range and Pasture Management.

Brief Description:

As a part of the 2001 Winter Series classes, the MSU Forage Specialist and College of Ag professors presented information on Alfalfa production management, and effects of grazing system lengths on profitability for range cow -calf operations. Over 200 producers attended these classes in eight different location around Eastern Montana.

Impacts/Accomplishments:

- Producers learned the effects of extending the grazing season using a fixed resource base and how that might impact on breeding dates and weaning dates. They learned how to more efficiently manage alfalfa production as a component of their winter forage base. Surveys showed that as a result of these workshops, producers the management information and practices presented would increase their economic returns by as much as \$5,000 each. The total economic returns estimated by over 200 producers was about \$500,000.

Funding Source:

Federal 3b - 3c, State, and Local government

Scope of Impact:

This program was specific to the Counties and Reservations in the Eastern 1/3 of Montana.

Goal 2: A Safe and Secure Food and Fiber System

Overview:

Providing a safe and secure food system continues to be a critical concern in Montana.

To address this concern, the Montana Extension Service has implemented these three programs:

1. Through EFNEP (Expanded Food and Nutrition Education Program), Montana Extension professionals train and supervise para-professionals and volunteers who teach basic nutrition and food skills to limited resource families and youth via one-on-one home visits and/or group classes through an in-depth series of lessons. EFNEP works to achieve lasting improvements for families while promoting immediate changes in food habits. In the last year, Montana EFNEP operated in four counties encompassing parts of three reservations: Big Horn County/Northern Cheyenne Reservation, Blaine County/Fort Belknap Reservation, Missoula County and Yellowstone County/Crow Reservation.
2. Montana FSNEP (Food Stamp Nutrition Education Program) provides educational programs for food stamp households or those eligible. In 30 counties, para-professionals provide a series of lessons or single demonstrations with practical information and skill-building tips for choosing better foods, food handling, and food safety practices. To implement the Montana Food Stamp Program, nutrition education funds are made available to the Montana Extension system through a contract with the Montana Department of Public Health and Human Services.
3. Food Safety primary consists of implementing the ServSafe program. ServSafe is a program designed by the educational foundation of the National Restaurant Association to help meet the training and educational needs of people involved in the food industry. Participants learn about hazardous foods, safe food handling practices, importance of personal hygiene and temperature control, use of thermometers, and receiving and storing foods.

Goal 2:

Key Theme: Food Safety

Brief Description:

The ServSafe program aims to prevent food-borne illnesses through teaching proper food handling and food safety processes. Millions of Americans contract food-borne illnesses each year causing them to

become ill, resulting in the financial costs of lost wages and health care expenses. Preventing these illnesses is a focus of the Extension Service. This educational program was designed by the educational foundation of the National Restaurant Associations and has been implemented throughout Montana through the Montana Extension Service.

During these training courses participants learn about hazardous foods, safe food handling practices, the importance of personal hygiene and temperature control, use of thermometers, receiving and storing foods, etc. The program also teaches employees in food establishments how they can raise the quality of their establishment, lower costs and increase profitability using their newly acquired food safety skills. And most importantly, food service employees who practice food safety make sound decisions that can help keep their customers safe.

Impacts of the program:

Over 95% of graduates in the food safety programs throughout the state are now practicing safer food handling than before, resulting in safer food for the public. In one county, seventy participants were sent a six-month follow-up evaluation and 100% of people returning the survey expressed that they had put the principles learned at ServSafe into practice and/or had shared these practices with others. In another county, 100% of the participants in three separate workshops passed the certification exam. In several counties, using a pre-test/post-test ratio of incorrect answers, it was shown that there was a 43% gain of knowledge on the post-test. In these same areas, 86% of participants stated they learned new ideas on how to enhance their own food safety practices. In another county, the agent conducted six ServSafe workshops for 320 food service managers, food establishment employees, high school students, church and camp volunteers, counselors and Job Service applicants. The agent also conducted twenty one-hour food safety programs for 65 senior meal cooks and 30 volunteers from six senior meal sites, Headstart programs, the hospital and the food bank. Food managers who implemented the program stated 75% to 95% of the employees were satisfied with their ServSafe training. 100% of high school students who participated in the training were able to find food service oriented jobs and 90% of restaurant managers indicated that they would hire workers with food safety training and one-third of those managers said they planned on increasing the wages of those employees who had received the training. 100% of managers and administrators paid for their employees' training. Aging Services reported that the training resulted in 85% less food safety concerns and illnesses at senior meal sites and that 90% of their cooks developed safer food handling practices resulting in over \$1200 in savings due to less food spoilage and waste. 66 seniors stated that they have returned to attending senior meal opportunities as the result of the improved practices of their food handlers.

Source of Funding:

State and Local

Scope of Impact: Statewide

Goal 2:

Key theme: Food Security/EFNEP

Brief Description:

Through Montana EFNEP, Extension professionals train and supervise para -professionals and volunteers who teach basic nutrition and food skills to limited resource families and youth via one -on-one home visits and/or group classes through an in -depth series of lessons. During the past year Montana EFNEP was carried out in target communities by Extension Agents, Program Assistants indigenous to the audience and local collaborators, supported by state Extension staff and state agency collaborators. EFNEP continues to help families stretch their food dollars to feed their families in a nutritious manner. EFNEP's evaluation system (ERS) has documented the effectiveness of Montana EFNEP.

Impacts of the Program:

Food resource management practices of participants improved as indicated by the following:

73% of participants showed improvement in one or more food resource management practices (i.e. plans meals, compares prices, does not run out of food or uses grocery lists).

Nutrition practices of participants improved as indicated by the following:

79% showed improvement in one or more nutrition practices (i.e. plans meals, makes healthy food choices, prepares food without adding salt, reads nutritional labels or has children eat breakfast)

Effectiveness of Program for Youth:

- 88% of 2271 youth from 97 groups now eat a variety of foods.
- 85% of 2325 youth from 98 groups increased knowledge of the essentials of human nutrition.
- 76% of 1376 youth from 50 groups increased their ability to select low-cost, nutritious foods.
- 91% of 1854 youth from 86 groups improved practices in food preparation and safety.

Cost/Benefit Analysis: A regional study of six states, including Montana, showed that for every \$1 invested in EFNEP, \$8.82 in benefits from reduced healthcare costs can be expected.

Montana EFNEP staff has worked closely with many community organizations to reach and teach those most in need of self-sufficiency skills. EFNEP sites have various agreements in place to work with other agencies and are part of 36 coalitions in four sites. EFNEP works closely with 11 WIC sites and 4 Food Stamp Offices.

Source of Funding:

State and Local

Scope of Impact:

Statewide

Goal 2:

Key Theme: Food Security/FSNEP

Brief Description:

Montana FSNEP (Food stamp nutrition education program) provides educational programs for food

stamp households or those eligible. The program objectives for the Montana FSNEP are: 1. to deliver learning opportunities to increase nutritional intake, food preparation, food safety and food budgeting of food stamp recipients and food stamp eligible households in participating counties; and, 2. to assist individuals and families receiving food stamps and food stamp eligible households in acquiring knowledge and skills for improved management of their food budget and resources. In 30 counties, para-professionals provide a series of lessons or single demonstrations with practical information and skill-building tips for choosing better foods, food handling, food storage, and food safety practices.

Impacts of the Program:

Improvements by Cluster of Behavior (adult participants)

Food resource management practices of participants improved as indicated by the following:

63% of participants showed improvement in one or more food resource management practices (i.e. plans meals, compares prices, does not run out of food or uses grocery lists)

Nutrition practices improved as indicated by the following:

76% showed improvement in one or more nutrition practices (i.e. plans meals, makes healthy food choices, prepares food without adding salt, reads nutrition labels or has children eat breakfast)

Youth Impact indicators:

- 83% of 682 youth from 32 groups now eat a variety of foods.
- 86% of 682 youth from 32 groups increased knowledge of the essentials of human nutrition.
- 83% of 545 youth from 24 groups increased their ability to select low-cost, nutritious foods.
- 83% of 605 youth from 28 groups improved practices in food preparation and safety.

Stakeholder Enhancements:

One of the goals of the Montana FSNEP program is to establish/increase collaborative efforts between Montana State University Extension Service and the Montana Department of Public Health and Human Services and to build collaborative partnerships in the communities involved in FSNEP. Those counties involved with Montana FSNEP report that they are discovering new partners or agencies to collaborate with as the success of their program spreads. Some are building partnerships in communities where there have not been established partnerships in the past. At the state level, both agencies continue to facilitate the process of working together.

One new state level partnership is with the state commodities program. A senior commodities program began this year in several sites across the state. The commodities are distributed through senior meal sites. New curriculum materials were designed to assist seniors in utilizing the commodity foods. FSNEP nutrition assistants have utilized the handouts to prepare commodity foods in their presentations at senior meal sites.

In Montana's most populous county, a new partnership with the County Council on Aging was formed. Seniors from the Retired Seniors Volunteers Program (RSVP) were trained to present nutrition lessons at

senior meal sites throughout the county. Two lessons were provided to each of eight meal sites through the work of five volunteers.

At least four communities have started food banks since the inception of Montana FSNEP. Other new partners at the community level include: mental health centers, Human Resource Development Councils, Housing Authorities, Department of Family Service and various after school youth programs.

Source of Funding:

State and Local

Scope of Impact:

Statewide

Goal 3: A Healthy, Well Nourished Population

Overview:

Input from county Extension offices indicate Native American populations are preparing more nutritious meals and eating healthier as a result of Extension education programs.

As a result of Extension health fairs held throughout Montana, statewide input indicates:

- consumers are increasing physical activity and preparing nutritious meals to reduce obesity;
- consumers adopted dieting guidelines to reduce their risk of cancer, high cholesterol, food allergies and diabetes;
- in one county, 200 consumers experienced first-hand the daily routine of wheel-chair users;
- in one county, the health fair saved consumers over \$245,000 on health care costs by providing 650 blood chemical screens, 250 bone density scans and hundreds of free screening such as blood pressure, vision, hearing, lung capacity, fitness step test, flexibility, body fat percent, and peripheral vascular disease screening;
- based on one county health fair consumer survey, 73% of the individuals showed their test(s) to a physician and 42% plan to make changes to lower their cholesterol.

A total of 2908 Montana consumers including 268 Native Americans adopted practices including building, remodeling or purchasing homes to improve indoor air quality.

Workshops for real estate professionals, homebuilders, home inspectors and low-income weatherization contractors improved the human health of 536 consumers (including 293 Native Americans) through the implementation of the “Montana Home*A*Syst” program.

Many nutrition programs were implemented to reach target audiences including:

- pre-retirement workshops
- child-care, pre-school and after-school education programs
- foster grandparent programs

Goal 3:

Key theme: Human Nutrition

Brief Description:

From the food we grow to how meals are planned, nutrition has a major impact on Montana consumers and promoting good nutrition is a primary emphasis of Extension professionals. To reach consumers with the diverse range of nutrition issues, Extension programs serve many audiences using many unique outreach methods. Some of the nutrition topics Extension agents deal with include: “Quick2Fix”, “Cook It Quick and Healthy” and “Food for the Busy Family” for families on the run; “Lifesteps” weight management program; “5-A-Day Fruits and Vegetables” for long-range disease reduction; “What is a Healthy Diet Anyway” to encourage sensible, healthy diets; “ABC’s of Nutrition” and “Success at School is as Easy as ABC” for teachers and youth; the “Crow Community Garden Project” for developing a stronger awareness of the need for fresh fruits and vegetables in the diets of Native Americans; and “Nutrition as We Age” - a food and nutrition program for aging consumers.

Impact/Accomplishments:

- For youth, older Montanans, Native Americans and educators, the Montana Extension has initiated many outreach programs and worked toward stronger measures of impact. Notable accomplishments such as the “Crow Community Garden Project” have assisted Native Americans on the Crow Reservation develop over 56 home gardens, planted a large demonstration and education garden and green house. This program has received national recognition from the Kellogg Foundation. Another program documented 440 older Montanans improved nutrition and health habits through Extension programs.
- While comprehensive documentation of impacts is an on-going effort, much success has been in the establishment of stakeholders to enhance program focus and expand outreach. To this end, partners and stakeholders that have played a significant role in human nutrition outreach include the “Eat Right Montana Coalition”, Montana Office on Aging, the seven Native American tribes in Montana and the Little Big Horn College (Hardin, Montana).

Source of Funding:

State and Local

Scope of Impact:

Statewide

Goal 3:**Key theme: Human Health****Brief Description:**

The MSU Extension Service has focused outreach efforts on these four human health program areas 1) *Healthy Indoor Air for Montana Homes* dealing with home indoor air quality issues and health effects such as asthma, carbon monoxide poisoning, lead poisoning, etc.; 2) *Montana Home*A*Syst* dealing with the health effects of home environmental quality issues (for Native American audiences this program is called *Connected to the Earth*); 3) *Montana Pathways to Health* dealing with the prevention of eating disorders; and, 4) *Wellness (WIN) in the Rockies*, a three state program involving Montana, Wyoming and Idaho focusing on improving attitudes/behaviors related to food, physical activity and body image.

Impact/Accomplishments:

- Through a network of professional training and certification programs targeted for Extension agents, public and Indian Housing Authorities, home builders, childcare providers, home inspectors, real estate professionals, local health departments and low-income weatherization programs, 1343 Montana professionals reported adopting practices and outreach strategies to improve home indoor air quality. Practices adopted include lowered radon levels, controlled ventilation to improve levels of humidity and molds, monitored and corrected carbon monoxide levels, reduced the use of household products containing volatile organic compounds, eliminated household triggers of asthma and allergens and tested and corrected excessive levels of lead-paint. As a result of training professionals to deal with indoor air quality issues, these individuals have impacted thousands of Montana consumers to improve their health.
- The *Montana Home*A*Syst* and *Connected to the Earth* are programs implemented in cooperation with the Montana Board of Realty Regulation and seven Montana tribal housing authorities. Through this network, 536 Montana families have reduced home environmental health risks through these programs.
- Local health fairs have provided a forum to make a significant impact on Montana consumers dealing with nutrition and human health issues. Statewide input indicates that as direct result of Extension initiated health fairs, consumers are increasing physical activity and preparing nutritious meals to reduce obesity. Data also shows consumers adopted dieting guidelines to reduce their risk of cancer, high cholesterol, food allergies and diabetes. In one county, 200 consumers experienced first-hand the daily routine of wheel-chair users. In another county the health fair saved consumers over \$245,000 on health care costs by providing 650 blood chemical screens, 250 bone density scans and hundreds of free screening such as blood pressure, vision, hearing, lung capacity, fitness

step test, flexibility, body fat percent, and peripheral vascular disease screening. Another county health fair consumer survey indicated that consumers followed -up and used the information obtained from their health fair - 73% of the individuals showed their test(s) to a physician and 42% planned to make changes to lower their cholesterol.

Source of Funding:

State and Local

Scope of Impact:

Statewide

Goal 4: An Agricultural System that Protects Natural Resources and the Environment

Overview:

Montana is known as “the Last Best Place.” A statewide survey revealed that the public is concerned with environmental issues at many levels. There is concern for water and air quality, soils, rangelands, forest, wildlife, and multiple use of public lands.

1,080 field faculty days were devoted to developing, implementing and evaluating these programs. 2.5 FTE of Specialist time was devoted to this goal. Faculty are on a combination of Federal Smith/Lever 3b&c, State and County funding sources. 14,941 people attended, and 6,333 actually adopted practices. Included among those who completed programs were 888 American Indians, 114 Hispanic, and 47 all other race. The American Indian participants made up 10 % of the total audience and that exceeds parity of participation. Those of Hispanic Ethnicity made up 1.3% of the audience and that was slightly below parity.

Selected impacts/Outcomes are:

- It is estimated that producers who produced and utilized annual forages as a hay source instead of buying alfalfa hay during drought conditions, saved a total of \$900,000.
- Producers who had adopted improved weed, disease, and insect management practices recorded yield increases of 1-5 tons/ac for sugar beets and/or 10-20 bu/ac for irrigated malting Barley. . This

translates into a per acre cash receipt increase of \$200 for sugar beets and \$89 for malt barley. Through correct insect monitoring and control decisions 5 producers were able to avoid applying insecticide, saving an average of \$10/ac in production costs.

- On sites where insects were released in 1991, the ground cover was 65% leafy spurge and 30% grass. Now, those same areas were found to have 5% leafy spurge and 90% grass with no re-seeding.
- Producers have indicated an awareness of the pest problems that have developed on their farm operations, and have taken steps to minimize pest problems by altering planting dates, selecting tolerant varieties, using recommended seed treatments, and by rotating traditional small grains with crops such as oilseed, pulse and forages.
- The participants and the county was rewarded over 500,000 dollars in grants in the year 2000-2001. The costs of an integrated program has saved each of them a minimum of 50% on out of the pocket expenses. The participants also receive training and education at four workshops, and individual assistance and access to equipment use to identify and manage their property in noxious weed control. Landowners also trained and licensed to use restricted chemicals as one management tool. Biological and re-vegetation played a large part in the communities to manage the weed infestations. Five communities over a land area of 60,000 acres came together to do the projects in a cooperative effort.
- One producer reported that he had saved about \$15,000 on winter feed costs due to knowledge gained from use of the computer ration balancing program and the efficient use of available forages. The other sixteen operation realized a savings of about \$5,000 on winter feed costs, the total savings were in excess of \$100,000.
- By knowing drought conditions and the extent of them early in the year, ranchers can plan accordingly. This information has also proved important in speeding up the disaster declaration process for emergency situation and “USDA drought and disaster payments.
- Ranchers have told me that without the release of CRP they would have no livestock left.
- Participants learned how to mitigate drought effects by selling cattle, planting annual crops, scheduling irrigation, testing for nitrates
- Participants learned chemical, mechanical and biological control options and how to use them in conjunction with one another. Chemical application methods and the importance of properly applied rates were learned which have reduced chemical

cost for many of the participants, saving thousands of dollars in application cost.

Goal 4:

Key Theme: Drought Mitigation

Brief description:

During 2001 Montana continues in a three year drought and recorded in many areas to be the worst in history. Drought is a regularly occurring phenomenon in Montana. It affect the lives of everyone who lives here. The governor has appointed a State Drought Committee and has instructed County Commissioners to establish local drought committees to deal with drought planning. Extension Agents head up many of those committees in Montana Counties.

Producers learn how to mitigate drought effects by selling or relocating livestock, planting annual forage crops, scheduling irrigation and testing forages for nitrates.

Impact/Accomplishments:

- Participants in this program planted an estimated 15,000 acres of annual forages to compensate for drought related hay shortages, with an estimated yield of 1.5 tons per acre. The total estimated yield from all acres was 22,500 tons of forage. The estimated cost of production for the total tons produced was \$50/ton, compared to an average alfalfa hay purchase price of \$90/ton. It is estimated that producers who utilized annual forages as a hay source instead of buying alfalfa hay, saved a total of \$900,000.
- For most of the participants, the benefits came from an increased understanding and knowledge of forage management, especially in times of drought. Three hundred constituents learned more about sampling and testing forages for nitrates. Approximately one third of those learned about alternative feeding practices due to nitrate toxicity problems in the forages they had tested. Over one hundred constituents adopted different management practices in terms of annual forage crop production and quality testing of forage produced from annual crops. Seventeen agricultural operations utilized a ration balancing computer program available from the Extension Office; one producer reported that he had saved about \$15,000 on winter feed costs due to knowledge gained from use of the computer program about the more efficient use of available forages. The other sixteen operations realized a savings of \$5,000 on winter feed costs, the total savings were in excess of \$100,000.
- By knowing drought conditions and the extent of them early in the year, ranchers can plan accordingly. This information has also proved important in speeding up the disaster declaration process for emergency situation and "USDA drought and disaster payments. Five counties released for grazing on CRP in 2001 because of the information we had and our involvement in the drought advisory process. This saved herds from being further culled or liquidated, saved purchasing even more costly feed and kept the hay price from exploding. Ranchers have said that without the release

of CRP they would have no livestock left.

Source of Funding:

SmithLever 3b&c, State, Local, grants

Scope of Impact:

Generally statewide. Eastern Montana was not effected as severely as the central and western areas of the state.

Goal 4:

Key Theme: Forest Resource Management

Brief Description:

The forest stewardship workshop is designed to educate non-industrial private forest landowners on how to establish and maintain a healthy forest ecosystem on a sustainable basis. Five stewardship workshops were conducted in Western Montana. Participants learned how to inventory their property, after which they returned home and completed the inventory and then returned to develop their stewardship plan.

Those who have developed a stewardship plan are invited to participate in the next phase if they also have streams, wetland, or other bodies of water surrounded by their forest land. This next phase is the riparian/wetlands forest stewardship workshop which builds on the skills already learned.

A Forest Road Maintenance workshop for 28 private forest landowners was implemented and a the publication Water Quality BMPs for Montana Forests was updated and published. 13,500 were sold in the first 6 months. It is used to train loggers and landowners.

Impact/Accomplishments:

- 103 participants representing 79 separate forest ownerships completed the program with 70 completing the development of a 10 year stewardship plan for their forest property. 63 of them agreed to have their plans certified which represented 24,777 acres of forestland in Montana. This program has developed 1012 certified plans representing 485,283 acres.
- Riparian and wetland areas on forest land are some of the most important. These locations and how they are managed are critical to maintaining clean water, fish resources, and wildlife habitat. Private forest owners in Montana manage over 3.5 million acres of forestlands. They need to understand as much as possible about these unique parts of the landscape. All society benefits from the wise management of these areas.
- 45 forest landowners learned about proper and practical methods of harvesting salvage timber from

burned timber land, and to minimize erosion. They learn to identify and prevent the spread of noxious weeds that are a threat to burned areas.

Source of Funding:

Other funding sources - USDA Water Quality Programming Grant
Private well water user participation
SmithLever 3b&c
Local

Scope of Impact:

State specific

Goal 4

Key Theme: Integrated Pest Management

Brief Description:

Pest management is one of the biggest and most important on-going efforts in Montana. Weed, Insect, disease, and vertebrate pests affect the health of crop lands range lands, forest lands, parks, home sites, fish, wildlife and livestock in both rural and urban areas of the state (pests are everywhere). Educational programs focus on the integration of cultural, biological and chemical control and management techniques.

Impacts/Accomplishments:

- Participants in the Huntley CIC were able to identify production practices that would help increase farm profitability. Producers who had adopted improved weed, disease, and insect management practices recorded yield increases of 1-5 tons/ac for sugar beets and/or 10-20 bu/ac for irrigated malting Barley. This translates into a per acre cash receipt increase of \$200 for sugar beets and \$89 for malt barley. Through correct insect monitoring and control decisions 5 producers were able to avoid applying insecticide, saving an average of \$10/ac in production costs. 79 producers were able to decrease the environmental impacts of noxious weeds on their property through early identification and control of noxious weeds.
- On sites where insects were released in 1991, the ground cover was 65% leafy spurge and 30% grass. Now, those same areas are found to have 5% leafy spurge and 90% grass with no re-seeding. The owner of the 2,500+ acre leafy spurge infestation has reported that over the past 10 years he has moved insects and established approximately 150 sites. He says there isn't a patch of leafy spurge on his place where he can't go out and collect insects. His cattle are now grazing in areas where they haven't grazed in 15 years
- Producers have indicated an awareness of the pest problems that have developed on their farm operations, and have taken steps to minimize pest problems by altering planting dates, selecting

tolerant varieties, using recommended seed treatments, and by rotating traditional small grains with crops such as oilseed, pulse and forages. Producers are indicating the desire to initiate new crops and cropping systems, but are reluctant due to limited machinery requirements and risk. Even with this reluctance, the rotational crops now account for 10 to 15 percent of cropped acreage in Sheridan County.

- The participants and the county was rewarded over 500,000 dollars in grants in the year 2000-2001. The costs of an integrated program has saved each of them a minimum of 50% on out of the pocket expenses. The participants also receive training and education at four workshops, and individual assistance and access to equipment use to identify and manage their property in noxious weed control. Landowners also trained and licenced to use restricted chemicals as one management tool. Biological and re-vegetation played a large part in the communities to manage the weed infestations. Five communities over a land area of 60,000 acres came together to do the projects in a cooperative effort.
- Program participants learned the importance of identifying and controlling noxious weeds. They learned that by early identification of noxious weeds will enable them to quickly control them and reduce the long term economic impact the weeds may cause. Participants additionally learned chemical, mechanical and biological control options as well as how to use them in conjunction with one another. Chemical application methods and the importance of properly applied rates have reduced chemical cost for many of the participants, saving thousands of dollars in application cost.

Goal 4:

Key Theme: Wildlife Management

Brief Description:

Conflicts exist between landowners, outfitters, and sportsman on issue of wildlife management. When groups come together to problem solve they find that there are common interests and solutions that benefit all concerned. This program assists landowners in the management of wildlife on their private land. It includes educational programs on habitat enhancement as well as population control and management.

Impact/Accomplishments:

- Producers are able to improve wildlife habitat and reduce damage caused by wildlife. 1360 producers have completed this program and 700 have put their knew knowledge to work. Implementation of recommended practices has increase hunting enterprise income by \$100.000. Producers were able to reduce wildlife damage to crops and livestock by 300.000.

Source of Funding:

Smith-Lever
State
Local

Scope of Impact:

State specific

Goal 5: Enhanced Economic Opportunity and Quality of Life for Americans**Overview :**

Montana Extension has a wide variety of programs outlined under Goal #5, Enhanced Economic Opportunity and Quality of Life for Americans. Each of these programs contributes to strong families and healthy communities. The programs being highlighted in this years annual report include Community Development, Jobs and Employment, Leadership Training and Development, Tourism, Parenting, Promoting Housing Programs, Promoting Business Programs, Family Resource Management, Estate Planning and Youth Development/4-H.

The Extension faculty involved in delivering these programs is limited in number but compensate by being strategic in their planning and cooperative in their delivery. Examples of the outcomes and/or impacts of the

faculty efforts include:

- Jobs have been created or maintained within communities which is of great concern for many Montana areas.
- Parents reported learning how to reduce stress and manage anger.
- Parents reported they developed a constructive business partnership with their former spouse in parenting.
- Lower utility costs have benefited over 280 Native American families.
- Youth (11,000) have learned that managing money is just as important as how to earn it and have developed management and decision making skills.
- Estate Planning resulted in families writing wills, reviewing titles of their real and personal property, reviewed insurance situations, and made necessary changes.
- 4-H gave young people the competence, confidence, and connections with caring adults to be able to contribute to the vitality of their communities, now and in the future.

During 2001, Montana field faculty devoted 13% of their time to Community Development programs. Community Development efforts addressing Goal 5 can be roughly grouped into the following key themes: Community Development, Promoting Business Programs, Leadership Training and Development, Tourism, Jobs and Employment and Home based Business Education programs. Most of these programs continue to build over several years. In 2001, the fruits of several years efforts in many counties were recognized. For example, 90% of the goals from a five-year long visioning process in Deer Lodge County have been accomplished this year and a second visioning effort was launched.

Likewise, the Youth Development program receives about 25% of faculty time devoted to programs and activities that teach youth and adults life skills and the Family Consumer Science programs reach Montana families helping them cope with daily stresses and decisions.

Montana Extension understands the value of programs that educate families to help make strong communities leading to a healthy state.

Goal 5

Key Theme: Parenting

Brief Description:

A variety of parenting programs are offered throughout Montana to meet the needs of local communities. Some involve working with parents on a specific skill such as the RETHINK Anger Management program. The Strengthening Families Program works with both the youth and parents in the same program, allowing them to work on skills during the sessions. Co-Parenting Through Divorce and the Single Parenting Series meet the needs of specific family structures and situations. How to Raise a Teenager was a one-time

program presenting a developmental look at parenting. Building relationships between parents and children was the goal of Kids Day offered in eastern Montana providing an opportunity for parents and children to participate in fun structured activities that are often not available in very rural communities. All of these programs provide an opportunity for parents to gain skills and strengthen relationships with their children.

Impacts/Accomplishments:

Approximately 933 parents attended parenting -related programs during the past year. Parents report learning how to reduce stress, develop ways to cope with the daily stressors of parenting, and how to manage anger. Parents attending the Co-Parenting Through Divorce classes learned how to establish and implement a parenting plan. The majority reported that they developed a constructive business partnership with their former spouse in parenting. Three parents attending a parenting program on raising adolescents reported improved relationships with their teenagers. All programs found that parents intended to use the information they gained in the parenting program.

Sources of Funding:

State and local

Scope of Impact:

State specific however several of the packaged curriculum such as Strengthening Families and RETHINK are offered in many other states as well.

Goal 5:

Key Theme: Promoting Housing Programs

Brief Description:

To enhance the economic opportunity and quality of life for Montana families, the Montana Extension Housing Program offers programs to consumers and professionals throughout Montana. During the past year, housing programs have been offered to Indian Health Services and Indian Housing Authorities on all seven of Montana's Native American Reservations. For the real estate industry, three Extension housing programs are certified by the Montana Board of Realty Regulation. For the Montana building industry, a training and certification program consisting of 24 6-hour courses have been established and offered throughout the state. For the Montana low-income weatherization program, a training and certification program has also been established and expanded to 12 western states.

Impact/Accomplishments:

As result of these programs, 108 real estate agents have integrated Extension housing information dealing with environmental issues and home -based methamphetamine labs into home inspections and buy -sell contracts. As a result of conducting 50 home safety-related classes, 300 consumers have been trained in home safety and life-skills such as CPR. There have been some documented cases of lives saved as a result of the training. Through Native American housing programs conducted by the Montana Extension Service, 280 Indian families have reported that as a result of Extension education they have benefitted by lower utility costs, being warmer and more comfortable, living in safer and healthier homes, and learning self -

improvement home repair skills. Through the Montana Extension Certified Builder Program, 32 home builders have completed continuing education programs and are applying management skills to their work.

Stakeholder Enhancement

As a result of the housing programs, the Montana Extension Service has developed strong partnerships with state and national organizations such as the National Association of Home Builders, the Montana Department of Commerce - Board of Realty Regulation, U.S. Department of Housing and Urban Development and the U.S. Department of Interior.

Sources of Funding:

State and local

Scope of Impact:

State

Goal 5:

Key Theme: Promoting Business Programs

Brief Description:

Since 1992, the Montana Extension Service has provided technical assistance to Montana small businesses through its pollution prevention program. The non-regulatory program provides direct assistance to businesses that generally pose a high risk to the environment and workers. Typical target businesses include printers, dry-cleaners, auto-repair and body shops, and wood finishing. Through technical assistance and training, the pollution prevention program helps businesses reduce solid and hazardous wastes and their disposal costs.

Impact/Accomplishments:

As a result of the pollution prevention program, 20 Montana small businesses were honored by Montana Governor Judy Martz for implementing waste minimization and resource conservation efforts which were above and beyond those required by law or regulation. Through a survey conducted by the program, 185 Montana businesses reported impacts such as reduced hazardous material handling, storage and liability risks/costs; reduced water and energy costs associated with equipment and processes; reduced regulatory/compliance expectations; improved waste-water discharge and costs; improved worker morale; and, improved consumer relations.

Stakeholder Enhancement

Due to the success of this program, the efforts have been expanded and funded to serve 6 states in the U.S. EPA Region 8.

Sources of Funding:

Scope of Impact:

Montana, North Dakota, South Dakota, Colorado, Utah and Wyoming

Goal 5:

Key Theme: Family Resource Management

Brief Description: During 2001, the family resource management program focused on the High School Financial Planning Program, Medical Care Savings Accounts, Money on a Bookshelf, and Quicken for Personal and Family Finances.

Impacts/Accomplishments: HSFPP: The MSU Extension Service, the National Endowment for Financial Education, and Credit Union National Association have teamed up with local teachers to provide the High School Financial Planning program (HSFPP). During 2001 1,925 students in 44 schools participated in the program. During the past 10 years over 11,000 Montana youth have learned that managing money is just as important as learning how to earn it.

As a result of participating in HSFPP, 86% of the high school students demonstrated an increase in financial knowledge or behavior when dealing with money. And, it appears that the changes lasted over time. Three months later, 58% of the students said they had improved their spending habits and 56% indicated their savings habits had also improved. When it comes to making financial decisions, 84% indicated they felt more confident. Montana Medical Care Savings Account Act: MSU Extension collaborated with state agencies and professional organizations to create an awareness of the benefits of MSAs. The goal was to inform the public that they can save money for medical expenses and long-term health care and reduce state income taxes at the same time. As a result of twenty-two newspapers publishing an article on MSAs, more than 3,000 copies of the MontGuide were distributed in 2001. In addition, 250 Montanans attended seminars on the topic, Money on a Bookshelf: Over 180 parents became aware of how they can teach literacy and finances to their children through books. Quicken for Personal and Family Finance: Twenty-two Extension Agents attended inservice education on Quicken so they could offer educational programs in their counties in 2002.

Sources of Funding:

State and Local

Scope of Impact: Montana is one of 50 states that are offering HSFPP. The MSA program is specific to Montana. The Money on a Bookshelf was originally developed by Nevada. Three agents from North Dakota attended the Quicken Inservice Education Session.

Goal 5:

Key Theme: Estate Planning

Brief Description: Estate Planning continues to be a concern to Montana citizens. Although the Montana Inheritance Tax was eliminated by a voter passed initiative effective January 1, 2001, and the Economic Growth and Tax Relief Reconciliation Act was passed and signed into law in June of 2001; both do not eliminate the need for citizens to plan for the distribution of their estates regardless of size. The MSU Extension Service has published 25 MontGuides that explain state and federal laws on intergenerational transfers. With the financial assistance from the Business, Estate, Trusts, Tax and Real Property Section of the State Bar of Montana, a World Wide Web site is available that contains all 25 estate planning fact sheets: <http://www.montana.edu/www.pb/pubs/estate.html>. Members of the State Bar, Montana Inheritance Tax Division, and Montana Society of Certified Public Accountants were involved in the review of the materials developed.

Impacts/Accomplishments: Approximately 2,820 Montanans have participated in estate planning seminars in the state during the past year. Over 900 people who had purchased the estate planning study at home packets received the new MontGuide on Montana Estate Taxes. Past evaluations have revealed that as a result of learning about estate planning: 8% had written a will and 29% intended to do so; 28% reviewed the titles of their real and personal property with 13% finding changes were necessary in the way their property was titled; and 39% reviewed their insurance situation and 8% found changes were necessary. One participant saved \$60,000 in taxes by using the resources available through this program to help set up his aunt's estate.

In cooperation with the Little Big Horn Tribal College and Crow Indian Land Owners Association, a packet was developed entitled "Planning for the Passing of Crow Lands to Future Generations". The packet was distributed to 43 enrolled members during an all day seminar in May, 2001. Participants became aware of the consequences of not writing a will. Informational conversations with participants revealed that they saw the need for writing wills, but they felt that will writing is a "white man's" method, not theirs.

Sources of funding: Financial assistance from the State Bar of Montana was received to develop and maintain a web site listing the estate planning MontGuides.

Scope of Impact: Several sections of the estate planning the basics packet are specific to Montana. Other states in past years have adapted the federal MontGuides for their own states.

Goal 5:

Key Theme: Community Development

Brief Description:

Continuing efforts from previous Community Visioning projects took place in Jefferson, Deer Lodge, Teton, Glacier, Wibaux, Powder River counties. A new Community Visioning Project was launched in Lockwood, Yellowstone County. Agents in Judith Basin and Lewis and Clark County provided planning

and funding guidance for public facilities. Stillwater, Choteau and Carbon County agents led county disaster preparedness efforts. Three Asset Based Community Development workshops were presented by Nebraska Specialist, John Allen, resulting in ABCD projects starting in Broadwater, Valley, Dawson and Deer Lodge Counties.

Impacts/Accomplishments:

These activities resulted in signs to direct tourist downtown, general clean -up, removal of old cars, work on old style street lamps, boulevard trees, garbage cans, benches and restoration of a historic building in Wibaux; street light upgrades, public restrooms, interchange improvements and a recreation complex in Whitehall; a county growth policy in Teton County; a long -distance learning center in Sanders County; a community wide clean up day in Deer Lodge County; continued progress on community goals in Glacier County; progress on fairground facilities in Lewis and Clark and Judith Basin Counties; disaster emergency plans in Stillwater, Carbon and Choteau Counties; and, a new rural road sign system and 911 service in Choteau County.

Sources of funding: Federal 3b&3c, State and local.

Scope of Impact: State specific.

Goal 5:

Key Theme-Promoting Business

Jobs and employment

Brief Description:

Montana has the lowest average wage in the nation. Promoting business programs are aimed at stimulating Montana's economy.

During 2001, Western Regional Targeted Industries Project pilots kicked off in Deer Lodge and Jefferson Counties. The project is intended to produce computer matching of potential industries with compatible communities. Montana and Nevada are developing the program.

The 2000 State-wide Business Retention and Expansion program report was published, and a follow -up "Finding Qualified Employees" study launched.

Agent led business promotion efforts included: business roundtable series in Pondera and Jefferson Counties; business management training and counseling in Jefferson and Mineral Counties; a revolving loan fund in Mineral County; a six-day business fair attended by 850 in Cascade Count; and, a career development program for youth in Flathead County.

Impacts/Accomplishments:

The outstanding efforts of Madison - Jefferson County Agent Scott Mendenhall resulted in \$1,145,000 of federal economic development grants, 42 new positions in Boulder, production of a county business attraction video, commitment from a Tennessee firm for a 100 employee plant, and appointment to seven - member Governors Economic Development Advisory Board. Mineral County Agent Kevin Chamberlain's revolving loan fund helped keep 7 positions in the county and created 22 new positions.

Sources of funding: Federal 3b&3c, State and local.

Scope of Impact: State specific.

Goal 5:

Key Theme: Leadership Training and Development

Brief Description:

Montana Extension has a long history of leadership developments stretching back more than 30 years. Leadership workshops have been presented to over 5,000 Montanans.

Montana helped plan and deliver the Western Extension Leadership Development program this year. The program provides leadership training to some 30 Western Extension faculty. Five Montana Agents and Specialists participated. In addition, 13 agents conducted leadership -training programs on Communication skills, Communicating Via Computers, Leading Senior, Legislative Issues, and Conflict Management.

Impact/Accomplishments:

Strong leadership is extremely important to rural communities where it is necessary for local volunteers make it happen. Over 700 local leaders improved their leadership skills as a result of agent -conducted leadership training programs in 2001. Participants reported increased confidence in leadership roles and undertaking new leadership positions, contributing to renewed energy, new project ideas and more effective organizations.

Sources of funding: Federal 3b&3c, State and local.

Scope of Impact: State specific.

Goal 5:

Key Theme- Tourism

Brief Description:

Tourism is Montana's second largest industry with annual revenue of \$1.8 billion. Extension tourism educational programs help communities, farmers and ranchers determine their tourism potential and weigh the costs and benefits of developing those potentials. Three communities completed the 8-month long Community Tourism Assessment program during 2000, and three new communities began the program. Three Lewis and Clark Agri-tourism workshops were conducted with the Montana Stockgrowers. Three Agri-tourism workshops were also conducted with North Dakota Extension.

Extension is also an active participant in planning for the upcoming Lewis and Clark Bicentennial, which is expected to bring an additional 9 million visitors to Montana over 3 years. Extension helped communities across the state select Lewis and Clark projects. Agents serve on County and area Lewis and Clark planning groups. They also serve on Montana "tourism" county boards.

Impact/Accomplishments:

Extension programming by 10 agents and the Community Development specialist resulted in: a youth fishing pond in Valley County; a smelter stack interpretative sight in Deer Lodge County; improvements to the rodeo grounds plus 2 additional Lewis and Clark murals in Jefferson County; a \$5,000 grant for Lewis and Clark emergency planning in Choteau County; signs directing tourists to public facilities in Teton County; a rodeo and fair in Wibaux County; distribution of 20,000 brochures at the Detroit Travel show by the Garfield County Agent; and, 300 farmers and ranchers learning if a tourism business could work for them.

Sources of funding: Federal 3b&3c, State and local.

Scope of Impact: State specific.

Goal 5:

Key Theme: Youth Development/4-H

Brief Description:

4-H gives kids positive ways to improve themselves, their families and their communities through activities like leadership training, public speaking, learning to cook, learning about wildlife, woodworking, aerospace, photography, raising a pet, skateboarding. It is a proven, research-based program that is making a difference in the lives of today's youth and families.

Montana 4-H gives all parents opportunities to provide their children with a safe, structured, nurturing environment that fosters the initiative to learn and discover while instilling strong values and morals. 4-H gives young people the competence, confidence, compassion and connections with caring adults to be able to contribute to the vitality of their communities, now and in the future.

Impact/Accomplishments:

As recent study shows that the 4-H program has made a difference in the confidence youth feel. In the study, youth reported feeling that they have more control over things that will happen in their lives. They are more likely to feel good about who they are, to feel that they “have much to be proud of” and to feel that their lives have a purpose and meaning. 4-H members are also more likely than non-members to be able to “make their own decisions,” “do things on their own,” set goals, try new things, and take responsibility for their actions.

The study also revealed that 4-H members are more likely to report that they know how to resist negative peer pressures and how to “stay away from people who get me in trouble.” Youth involved in 4-H are more likely to take on leadership roles in their school and community. The study shows that 1) 32% 4-H compared to 20% non 4-H youth have been elected to a leadership position; 2) 27.4% 4-H compared to 21.4% non 4-H youth hold a leadership position in school; 3) 13.2% 4-H compared to 8.2% non 4-H serve as the chairperson of a committee; and 4) 25.3% 4-H compared to 17.2% non 4-H youth serve as a committee member. Youth in 4-H gain skills that prepare them to assume leadership roles in the future.

The study also indicated that 4-H youth have better relationships with adults than those who have not been in 4-H. The percentage of youth who talk to their parents about important issues in their lives is: 1) About drugs: 75% 4-H compared to 64% non 4-H; 2) About alcohol: 72% 4-H compared to 63% non 4-H; 3) About sex: 59% 4-H compared to 50% non 4-H; 4) About other serious issues: 77% 4-H compared to 66% non 4-H. In addition, the research revealed that 4-H youth are more likely to go to another adult (besides their parent or guardian) for help about important questions in their lives. They are more likely to report that they have had a good conversation with one of their parents and with another adult that lasted 10 minutes or more. And, they are more likely to say that if they had “an important concern” about drugs, alcohol, sex and any other serious issue, they would talk to their parents or guardians about it.

For the nearly 12,000 members enrolled in Montana 4-H and to a lesser extent the additional 18,000 youth engaged in 4-H activities, MSU research has shown that their futures are considerably brighter than their peers.

Source of Funding:

- SmithLever 3b&c
- State
- Local

Scope of Impact:

- Sate Specific

**STAKEHOLDER INPUT PROCESS
LISTENING CIRCLES**

As a result of the Asset Mapping training, representatives from two reservations identified the need for e -

commerce on their reservations. The Extension Service participated in a grant for an assessment of technical assistance and training needs. This project was initiated to address the participation of Native American business owners in e-commerce. The inductive, data-based approach employed combines research with outreach and provides recommendations for developing a culturally appropriate technical assistance and training program to help disadvantaged Native American business owners transition into the new technological era. Such a program is expected to contribute to economic self-development efforts which, in turn, are expected to contribute to broader nation-building goals necessary in achieving outcomes of tribal sovereignty and self-determination. Research was conducted by holding learning circles of four reservations across the country; two of which were in Montana. Collaborative learning circle participants were current or prospective Native American business owners.

Results of this research showed that Native American business owners recognize serious barriers to business development on reservations due to a lack of various kinds of infrastructure. However, they also recognize that they face significant social and cultural obstacles. These Native American business owners need appropriate access to built capital, social capital and human capital. There is a need for engaging in equal partnerships and will require the participation of and consultation with the populations that technical assistance and training are expected to benefit.

The strategies recommended include a program for technical assistance and training; bridging the digital divide which will require bridging the cultural divide. Technical assistance and training should be designed to produce the outputs necessary for Native American business success. These business outputs include contributions made to community service, the local economy, education, quality of life of tribal members, community and tribal confidence, quality interpersonal relationships, connections with the land, adherence to and perpetuation of important Native American values, veneration of Indian cultural rituals and heritage, and a sustainable income. An effective technical assistance and training program would be designed to recognize these measures of success and would incorporate them into delivery strategies. They would also acknowledge the limitations of e-commerce in acting as a single solution for promoting outcomes of Native American self-determination, empowerment, and sovereignty because of their potential hazards. As the learning circles reveal, Native American business owners are concerned that e-commerce without appropriate, attendant copyright laws will threaten them with the loss of intellectual property.

Tribal national will need support at the federal legislative and judicial levels to accompany technical assistance efforts from the federal administrative branch. Building bonding social capital within similar groups and rebuilding bridging social capital across different groups will be an important step in creating equitable partnerships necessary for true collaboration. Access alone is insufficient. Quality of inclusion is necessary also. This calls for more learning about engaging in equal partnerships and will require the participation of and consultation with the populations that technical assistance and training are expected to benefit.

STAKEHOLDER INPUT PROCESS CIVIL RIGHTS REVIEW

In March 2001 a civil rights compliance program review was conducted by USDA's CSREES of the

Extension Service's programs and procedures in Montana. The compliance review specialist determined that the MSU Extension Service should enhance more effectively documented efforts to reach the underserved populations of Montana.

One of the main themes that runs through the sixteen recommendations included in the civil rights compliance report for the MSU Extension Service is improving and expanding the manner in which Extension administration conducts county civil rights compliance reviews. A second important theme of the recommendations is for MSU Extension administration to expand and improve civil rights training opportunities for all of its Extension personnel.

The following steps are being taken by the MSU Extension Service to improve its program delivery to underserved populations:

- Extension agents will gain a more in -depth understanding of census information for their counties and reservations in order to know the potential underserved populations.
- Extension agents will more effectively document their educational programming efforts to reach the under -served populations.
- MSU Extension administration will provide more effective leadership in providing training opportunities for Extension personnel in civil rights.
- MSU Extension administration will improve and revise the public notification plan and implement a county compliance review process which is more educational and informative. The frequency of reviews will vary according to need.

The 2001 federal civil rights compliance review recommendations provide the MSU Extension Service with guidance in making Extension's programming development and delivery even more responsive to the under -served populations in Montana.

STAKEHOLDER INPUT PROCESS ASSET MAPPING

This project assisted communities in integrating workforce assets with economic development, and innovate with diverse, under -served and under represented partners in the planning and delivery of training in mapping community assets, skills and talents to enhance economic development opportunities.

Grant money was used to train county teams (county agent, job service member, one elected official (or designated representative), youth representative and an economic development representative) from 12 selected Montana counties, including two reservations, (under -served and under represented) to build capacity to help their communities create work assets that contribute to sustainable and economically sound communities. This also enhanced the work being accomplished in Montana by the Workforce Investment Act of 1998.

A Train-the-Trainer conference was held in Bozeman in late March, made possible with grant funding and a matching contribution from Montana State University Extension Service. Cascade County Economic Development Office offered funding to bring in Dr. John Allen, Director of the Center for Applied Rural Innovation (CARI) at the University of Nebraska, who spoke on Asset Mapping. Approximately 65 people attended a two day session. There were groups in attendance from the twelve identified counties: Broadwater, Cascade, Big Horn (Crow Reservation), Dawson, Deer Lodge, Fergus, Madison/Jefferson, Mineral, Rosebud (Northern Cheyenne Reservation), Pondera, Powder River and Valley; as well as MSU Extension Service, the Montana Workforce office, Montana Job Service, Montana Job Training Partnership, Montana Department of Labor and Industry, and Montana Department of Commerce.

STAKEHOLDER INPUT PROCESS IMPACT

Following the Bozeman conference, a newspaper article generated so much interest that groups from eastern and central Montana raised funds to return Dr. Allen for two presentations; one in Great Falls and one in Miles City. These fully funded by each community. Great Falls has a community development office within the Cascade County Extension office which funded that conference, attended by about 70 people. Miles City (Custer County) received funding from the Sixteenth Judicial District Court and the Montana Department of Labor and Industry. Additional support came from the School to Work Program and the Miles City Youth Coalition (MCCYC). As a result, the MCCYC has elected its first group of officers, set up By-Laws and become an extremely active organization.

Follow up work was also completed in Anaconda (Deer Lodge County). They finished a pilot project where High School students obtained responses from 200 households and held a community forum to present the information, get feedback and involvement. They did asset mapping with most of the community agencies, organizations, etc., plus the overall community assets and have also completed an individual/household asset pilot to add to the community leaders' assets and the twelve sector assets from focus groups.

A distribution list was created with all participants from the conferences in Bozeman, Great Falls and Miles City. Several individuals asked to be included even though they were unable to attend any of the conferences. It is used to keep all aware of new activities groups are initiating, along with future grant opportunities and funding possibilities.

STAKEHOLDER INPUT PROCESS UNDER-SERVED and UNDER-REPRESENTED

There are seven Indian Reservations in Montana. Five of those Reservations are served by MSU Extension agents (EIRP) who are totally responsible for programs targeted to the Agricultural and Youth Development needs of Tribal communities. Four MSU Agents are enrolled tribal members with their respective tribes at their respective reservations. The fifth EIRP project was added last October and the search has not yet been completed. All seven Reservations are 1994 Land Grant Colleges that are receiving funding for Extension Projects. Montana State University Extension Service has partnership agreements with all seven Tribal

Colleges and their Extension Agents have affiliate faculty appointments at MSU.

The program focus and outcomes achieved have been reported as required by our Federal partner. The funding cycles and program planning and reporting cycles are off -set from our other Extension programs. Plans and reports are submitted on the dates and in the formats specified by the federal partner and for the grant cycle. We will not be duplicating that information here.

Merit Review Process

The process articulated by the Merit Review committee in the memo dated July 29, 2000, still remains viable. It serves as a “functional” and useful road map for Extension Service Programs.

Our multi-state programs were centered around two issues: youth life skills development, and agricultural sustainability and profitability.

The Youth Life Skills Development involved several varied approaches in collaboration with Nebraska, Minnesota, North Carolina, Ohio, Virginia, New Jersey, Michigan, Wisconsin and New York. These programs include interstate exchanges, Western Region 4-H Institute, Western Regional 4-H Leader Recruitment Program, Community Asset Building, and Workforce Preparation.

The Agricultural programs were focused around integrated work on research and demonstration trials, and other related educational programs and events related to crop nutrients, pests and varieties. These were conducted in collaboration with North Dakota, Wyoming and Idaho. We collaborated with Wyoming on the WIRE (Western Integrated Ranch Education) program. We collaborated with Utah on our dairy program. These programs were supported by Smith Lever 3b&c funds in the amount of \$72,256.

The integrated programs that are reported were centered primarily around Goals 1, 4, and 5.

These programs are primarily in collaboration with researchers at our research centers and programs that are supported by Extension Specialists with split appointments with research. These programs included nitrate testing, field trials, integrated pest management, beef quality assurance, and noxious weed programs among others. They were supported by Smith Lever 3b&c funds in the amount of \$290,393.

Exclusive evaluation of the auditable integrated research and Extension activities was not conducted. Specific and separate outcomes were not reported by agents, specialists, or researchers that were involved in these auditable integrated efforts. These auditable integrated efforts were components of more comprehensive inter-disciplinary programs. The outcomes that were achieved are reported under goals 1, 4, and 5.

MANAGEMENT GOALS INFORMATION TECHNOLOGIES

The need for information and the increase in technology has sparked major adjustments. These have included improvements to our existing web based online reporting system, major renovation of existing web resources including- streaming digital video and audio, database automation of our Extension Publications department (MMS system) and PC recycling program.

WEB BASED ONLINE REPORTING REVISIONS and IMPROVEMENTS

With the new challenge of improving our existing reporting system we set to task by checking out existing systems of neighboring states. The areas of concern were to meet the needs of the the Federal Guidelines set forth for this reporting year and the needs of our Human Resource department, Budget and Fiscal personnel and the Administration. Our system still allows Online Reporting via the MSU Extension Service Intranet.

This system was a two part design. One for the specialists housed on campus and the other for our county employees. This resulted in a 100% reporting percentage of county agents with 935 individual reports submitted for the year 2001.

The information is still processed in various ways:

- Performance Appraisals
- Program Review
- Civil Rights Review
- Multi-State and Integrated Data
- Stakeholder Input
- Legislative Session Impacts and Outcomes

The system was critiqued and more changes will be implemented for the year 2002. These changes are a result of meetings with the staff of Extension Service on all levels. The changes will include the use of Active Server Pages to allow a greater audience to report and view the data in a “dynamic” page view. We are also implementing “dynamic” help screens for the target audiences.

The new Extension Agent side of the reporting system will be online in March of 2002. The Extension Specialist side will be reviewed and rebuilt to better suit the needs of other departments as well as MSU Extension Service. These changes will include data needed by the Deans and Department Heads of these colleges, thus decreasing the number of reports required by the faculty. This will free more time for the purpose of educating and research.

MAJOR RENOVATION OF EXISTING WEB RESOURCES

The Montana State Extension Service web site has increased from 20+ pages to over 150. The renovation has been praised by our staff and clientele.

We have added an online help forum for the world. It is a web based help section. The user can submit a question through the web site to the ISS office. It is then passed on to the correct specialist or agent for the topic or geographic location. We have received question from all over the United States and the world including Israel, New Zealand, Great Britain etc. These people may have similar soils or other needs that prompt them to contact us. 99% of all inquiries come from within Montana but with the advent of the World Wide Web we have been opened up to the world.

Montana is geographically large with the population wide spread. The connections to the Internet are extremely varied. We are in the process of implementing video and audio streaming to our web site. This will allow constituents to have access to video, audio and even class material that they may otherwise not get because of the geographic boundaries of this large state.

MATERIALS MANAGEMENT SYSTEM (MMS) DATABASE AUTOMATION of EXTENSION PUBLICATIONS DEPARTMENT

Extension Service Information Technologies was tasked with creating a “total” solution for the Extension Publications department. This was to ensure more uniform, faster and efficient operations. This end product is both precise and user friendly.

This mission was made possible through the extreme efforts of the Information Systems Technician, Millie Veltkamp. Her previous position was in Extension Publications. Her experience allowed administration to have an insiders view into the existing system and flaws in current procedures. We approached the system with the same process as the Online Reporting System. The end result provides but is not limited to extremely accurate data for orders, accurate billing, archived customer data, better inventory control, quality equipment check in/out, and precise fiscal reconciliation.

PC RECYCLING PROGRAM

With the constant upgrades of systems at MSU and within Extension Service we have implemented a “PC Recycling Program”. This system allows us to distribute systems that have been replaced by newer equipment to staff and faculty of Extension Service and other deserving agencies.

This system works on a “trickle down” type theory. As upgrades are performed the older systems are delivered to the Extension Service IT department, they are rebuilt and sent out to replace other older equipment.

These returned systems would normally be scrapped but are now rebuilt and cycled to deserving agencies such as county departments that are without computers. These systems have also been donated to agencies who directly help *youth at risk* and *women returning to the workforce*.

MANAGEMENT GOALS

ENHANCING CUSTOMER SERVICE and SATISFACTION

Extension Publications has implemented a new Materials Management System and an automated menu phone system. To ensure a more uniform, faster and efficient operation. With the help of these electronic systems we have the capability of serving our constituents' needs more efficiently and accurately. These systems are both precise and friendly.

These systems include:

- Automated confirmation of orders
- Better order data
- Accurate billing
- Archived customer data
- Better inventory control
- Quality equipment check in/out
- Precise fiscal reconciliation

These systems have alleviated:

- Lost orders
- Poor inventory control
- Duplication of effort
- Slow financial transactions between agencies

INSTITUTIONAL ENGAGEMENT

The Montana State University Extension Service, for 88 years a cornerstone of outreach and service at MSU, has implemented an eight-point plan resulting from an assessment that took place last year, as referred to in the Introduction of this report. The organization was reviewed by a team of Extension administrators from Oklahoma State, Utah State and Mississippi State Universities and the University of Nebraska - Lincoln, who met with MSU faculty, staff and administrators, as well as representatives of Extension's statewide constituencies.

The team confirmed that the Extension Service is fulfilling its role as the primary vehicle for carrying the knowledge of MSU to all parts of Montana. The review board offered some suggestions for improvements, which were then considered by an Extension working group, consisting of faculty from MSU Extension and other areas of the university; representatives from the Montana Farm Bureau and the Montana Graingrowers and Stockgrowers Associations; as well as one county commissioner. David Dooley, MSU's provost and vice president for academic affairs, chaired the working group, which also solicited input from Extension advisory committees and constituents.

The group developed eight recommendations, which were then approved by MSU President Geoff Gamble.

Among the recommendations have been development of:

- A communications plan facilitating increased collaboration with MSU colleges and other key participants;
- An on-going Extension Service coordinating committee consisting of MSU deans and department heads and chaired by David Bryant, vice provost and director of Extension;
- A university-wide 4-H Center for Youth Development providing a collaborative environment for programs related to youth development education.
- A revamped program planning system based on local needs. This allows Extension agents and specialists, as well as MSU Ag Experiment Station researchers and MSU College of Agriculture department heads, to set localized Extension priorities based on specific situations in different areas of Montana.

Other recommendations concerned internal procedures, such as management, professional development and performance reviews.

"President Gamble and I were extremely pleased with the recommendations that emerged from the review process," said Dooley. "We are confident that the outcome will be an even stronger set of Extension programs

that facilitate state-wide partnerships to improve the quality of life for all Montanans."

Added Bryant: "We feel confident that this increased emphasis on program planning will help us to collaborate more effectively with researchers from the ag research centers and with campus faculty. This extensive localized planning will ultimately improve our delivery of knowledge and research to the people of Montana."

REVISION TO THE 5 YEAR PLAN OF WORK

For the reporting 2002 reporting year, the reporting procedure was changed by replacing "**Program Name**" with "**Key Theme**". Before adopting this procedure, the specialists of MSU Extension Service were asked to categorize the existing programs into the Key Theme categories. This list was compiled and integrated into the Annual Reporting instructions for 2002. All MSU Extension online reporting in 2002 was categorized by "**Key Theme**".

