2007 University of Minnesota Combined Research and Extension Plan of Work

Brief Summary about Plan of Work

This plan of work describes the goals of seventeen planned programs that function as part of the University of Minnesota Extension Service and collaborate with the Minnesota Agricultural Experiment Station and its research. Each planned program operates within a particular area of expertise that makes use of research and employs educational tools that make a difference in Minnesota. Program teams work together as researchers and educators to design, develop, deliver and evaluate educational programs grounded in research related to their priority issue. By coordinating their program and business plans, these teams reach target audiences, evaluate stakeholder input, evaluate their work and update their program design. Working alongside these teams are administrative structures that support programs, manage stakeholders and communicate the value of the land grant system to Minnesota.From 2007 - 2011, the University of Minnesota Extension Service and the Minnesota Agricultural Experiment Station will work together to:
strengthen the ties between Extension and the Experiment Station;
enhance the scholarship of programs and educators;
strengthen connections between research, extension programming and communities' assessed needs;
continue to work on impact analysis for programming;
strengthen the diversity of programs and improve the cultural competence of staff; and
increase the impact of both research and outreach through multidisciplinary research and collaborative learning partnerships.

Estimated number of professional FTEs/SYs to be budgeted for this plan.

Year	Extenion		Research	
	1862	1890	1862	1890
2007	336.3	0.0	536.1	0.0
2008	336.3	0.0	536.1	0.0
2009	336.3	0.0	536.1	0.0
2010	336.3	0.0	536.1	0.0
2011	336.3	0.0	536.1	0.0

Merit Review Process

The merit review process that will be employed during the 5-Year Plan of Work cycle

- Internal University Panel
- External University Panel
- External Non-University Panel
- Combined External and Internal University Panel
- Combined External and Internal University External Non-University Panel
- Expert Peer Review

Brief explanation

The Minnesota Agricultural Experiment Station engages in a scientific merit and peer review processes for all research projects. Peer review involves both reviewers internal and external to the University. This takes place within each college that receives MAES funding and under the review and approval of the college department heads and associate deans for research. Each college engages in a yearly strategic planning process to submit a "compact" that is negotiated with central administration and assures that the colleges' research and outreach goals and direction are connected with priorities.

Evaluation of Multis & Joint Activities

1. How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?

Each team of specialists responsible for a planned program will regularly review trends, new research and interview key informants to assure that their program is addressing issues of strategic importance. Program teams meet regularly to review the work in communities and available research. This team approach also supports the monitoring of critical issues and needs. Their review culminates in the yearly development and updating of program business plans that articulate yearly goals for program adaptation and outreach.

2. How will the planned programs address the needs of under-served and under-represented populations of the State(s)?

During the winter of 2004, the dean and director appointed a task force to examine the status of diversity and inclusion efforts within Extension. The full report was presented in May of 2005. Nineteen recommendations were made in the areas of 1) access and representation, 2) climate and environment, 3) programs and products and 4) special initiatives.
At the same time, MAES undertook a survey of all colleges' departments receiving funding to ascertain their processes for getting input from underserved and under-representated populations to inform their research decisions, as well as their strategies for hiring graduate research assistants to achieve more diversity.By the end of 2006, benchmarks will be set for these goals and by 2011, progress will be made in each of these areas. These benchmarks and institutional investments will affect planned programs through HR documentation, personnel assessment of cultural competence, task forces committed to improving relationships with key groups, professional development and hiring and outreach incentives.
From 2007 - 2011, Extension will evaluate and enhance the new organizational administrative structures that were put in place in 2006 as a result of the work of this task force, for example:
A hiring tracking system was instituted to assure that hiring practices include diverse search committee members, advertise to diverse audiences, and assure fair treatment of all candidates.
Each Professional Plan of Work and Performance Review includes a description of plans and accomplishments to involve diverse audiences representative of the geographic area served.
New investments were made in staffing incentives and interns of color in order to nurture a "next generation" of diverse Extension staff.
A small grants program was instituted so that each Extension staff member can apply for up to $1,000 to further learning in the areas of diversity, multiculturalism, equity and social justice.
A Native American Task Force was created to examine and enhance Extension's programmatic outreach and partnership with Minnesota's tribal communities.
When important to making a difference, program teams will target specific minority groups, new immigrants and other underserved audiences. Efforts to redesign programs for these targeted groups will reach underserved populations from 2007-2011. For example:
Nutrition education and parenting education programs have adapted language and content to meet the needs of Latino cultures and Spanish-speaking participants.
4-H and youth development programs are targeting efforts at underserved children and their parents.
Food safety programs for food service workers will undergo cultural enhancements to support the burgeoning number of immigrant food service workers.
On-line and phone information scripts will continue to be translated into multiple languages when non-English speaking Minnesotans are likely to need the content.
New tracking systems will increase the reliability of reporting from programs as to whether they are accomplishing the goal of reaching under-served and under-represented populations.

3. How will the planned programs describe the expected outcomes and impacts?

We have elected to design our CSREES planned programs around Extension's seventeen areas of expertise. These are implemented and monitored by program teams that work together to plan and enhance their program business plans yearly. This "straight line" between the research and field work and our CSREES reporting system will assure field accountability to CSREES as a key stakeholder. Benchmarks will be monitored and changed based on yearly assessments and will be incorporated into the Program Business Plans as well as the CSREES Plan of work.

4. How will the planned programs result in improved program effectiveness and/or efficiency?

By clustering our programs and research under areas of expertise we have created a matrix for both managing programs and evaluating their effectiveness. It is clear we have been operating for some time in an environment of increasing need from our stakeholders, and increasing complexity of research problems, while at the same time seeing no-growth or diminishment of

formula funding for that work. By selecting critical issues, focusing our work and tightening the links between areas of expertise in Extension and research, we can both increase our effectiveness and also have a feedback system that tells us when to increase, decrease, or shift focus to maintain or increase efficiency.

Stakeholder Input

1. Actions taken to seek stakeholder input that encourages their participation (Check all that apply)

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Survey of traditional stakeholder groups
- Survey of traditional stakeholder individuals

Brief explanation.

The University of Minnesota works hard to maintain the confidence and trust of the people, organizations and communities it serves in all regions of Minnesota. We are firmly committed to building strong relationships that bring together the knowledge, skills and abilities necessary to build capacity in individuals, geographic communities and communities of interest. Extension and MAES strive to listen carefully and to be flexible and creative in its programs, collaborating with a wide range of diverse Minnesotans to assert the position, "We know Minnesota."Generally, Extension and MAES builds relationships with opinion leaders in government, education, agriculture, business, community organizations, the media, nonprofits, communities of interest and other opinion leaders. Targeted communications strategies build appreciation and active support. Audiences for each program receive high-quality, customized education. The appropriate technology is used to expand the reach of these programs.

2(A). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use Internal Focus Groups
- Use External Focus Groups
- Open Listening Sessions
- Needs Assessments
- Use Surveys
- Other ()

Brief explanation.

1. A statewide Extension Citizen Advisory Committee is convened three times a year and receives conference calls and informational reports. This committee reflects our various geographic and demographic constitencies.2. Counties conduct yearly budget reviews, assess the past performance of local Extension positions and programs, as well as their current relevance to county priorities. They base their budget decisions on the quality and relevance of the service they receive from local positions.3. Current program participants have their needs and satisfaction measured through post-event surveys.4. Targeted program audiences and constituents are identified by regional educators and their needs are assessed through regular conversations, end-of-event evaluations and more formal market surveys. By deciding whether or not to partner with Extension programming, they are "voting" on the relevance and effectiveness of programs.5. Regional educators and researchers act as an internal focus group. By forming program teams of regional educators and researchers who have relationships with key stakeholders, these stakeholders have a say in future program efforts.6. Legislators and higher education committees are identified by university relations and Extension's government relations department. Through personal meetings and committee presentations, Extension monitors whether the goals of the state and the voters are considered.
7. Colleges receiving MAES funding have advisory groups to inform their research decisions. This broad based input is supplemented by the stakeholder group input that individual researchers seek to provide feedback and support to their research programs.

2(B). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of traditional Stakeholder individuals
- Meeting with the general public (open meeting advertised to all)
- Meeting specifically with non-traditional groups
- Survey specifically with non-traditional groups
- Meeting specifically with non-traditional individuals
- Survey specifically with non-traditional individuals
- Meeting with invited selected individuals from the general public
- Survey of selected individuals from the general public

Brief explanation

Stakeholder input from geographic communities is incorporated at the county level through county extension committees. Regional extension directors act as liaisons to these committees, in collaboration with local extension educators and area program leaders.Stakeholder input from communities of interest is incorporated through ongoing contact betweent the leaders of these communities, their state associations, end of event evaluations, formal needs assessments and market research done by program teams.Fiscal partners (county commissioners and communities of interest) "vote with their dollars" as they fund local and/or regional positions.Targeted advisory groups provide feedback through formal meetings and communications.
Some research funding programs administered by MAES, such as the Rapid Agricultural Response Fund, have explicit requirements for stakeholder input and support for a project before funding is granted.

3. A statement of how the input will be considered

- In the Budget Process
- To Identify Emerging Issues
- Redirect Extension Programs
- Redirect Research Programs
- In the Staff Hiring Process
- In the Action Plans
- To Set Priorities

Brief explanation.

Input from stakeholders guides program teams and administration as they design research programs, outreach plans and structures. Stakeholder input is considered when answering questions such as:
Which stakeholders should educators work with as they conduct programming and market new research to places where it is needed?
Who is interested in our work?
How should research-based education be delivered? (Long-term consultation, workshop format, on-line courses, assessment, one-on-one consultation, mass media, web site, etc.)
What other resources do stakeholders turn to? Do these intermediaries need research-based information? Are we duplicating a service? What is our program niche?
What do stakeholders know about our programs? How do they hear about them?
Has past service and research been satisfactory? How might it be changed?
What new research should shift how we deliver programs?
What external factors have occurred which require us to change program strategies?
As Extension has established program specialization, regional centers and county purchase of service, stakeholder input is more integrated into our organizational response. The extent to which programs continue, grow and evolve relies upon satisfaction, positive feedback and investment from stakeholders as well as demonstration of positive educational impacts.Each program business plan and capacity area work plan includes input from external scans, stakeholder input and secondary data that feed the strategic planning process. It will directly influence the use of resources and the direction of research and outreach programs.

1. Name of the Planned Program

4-H Programs in Minnesota

2. Program knowledge areas

- 805 Community Institutions, Health, and Social Services 20 %
- 806 Youth Development 80 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The 4-H Program of the University of Minnesota support three programmatic strategies that provide quality, research-based out-of-schooltime learning opportunities for youth in kindergarten through one-year post high school. Each strategy is built upon Eight Key Elements of Quality Youth Development (Source?) These three program strategies include: 1) "Adventures" programs which provide fun, short-term learning experiences that reach new audiences of youth and family meeting quality standards outlined by the Eight Key Elements of Quality Youth Development. Adventures programs also identify youth for long-term term experiences. 2) "Clubs" programs are intended to involve young people in a longer term and more intensive learning and personal development experience. 3) "Urban Youth Learn" programs provide program leaders with tools, strategies and information about multiple aspects of program planning and development so that they can become more informed participants thereby more empowered in their practices.

6. Situation and priorities

Research indicates that Minnesota has the highest percent of two-parent working families and the highest percentage of young people in self-care during non-school hours. In fact, 40% of Minnesota's 10-12 year olds are home alone after school, with 56% of children in this age group spending some time in self-care each week (Cappizzano, 2000). Non-school hours can be a time of great risk OR opportunity. Research reveals that how young people spend their free time is a more powerful predictor of risk behavior than is race, family structure or socio-economic status. The 2001 MN 4-H Youth Survey revealed that youth involved in 4-H are more likely to volunteer in their communities and less likely to smoke cigarettes, consume alcohol or ride with a driver who has, spend an unhealthy amount of time watching TV and/or playing video and computer games. They are also less likely to have stolen or damaged property. The need for productive activity is strong, and requires an individualized approach, in urban Minnesota. Sixty-five percent of students in the St. Paul Public Schools are from low-income households. The St. Paul Public School Class of 2000 had a 62% graduation rates, and rates for African-American, American Indian and Latino students were under 50%. In Minneapolis Public Schools, 65% of the students are from low-income households. The Class of 2000 graduation rate was 42%; rates for African-American, American Indian and Latino students were under 35%. One way to positively impact the lives of urban youth is to ensure that out-of-school time opportunities are available to youth who need them. Youth-serving organizations, public school systems, and community members need to work together to optimize the learning and development of urban youth.

7. Assumptions made for the Program

Because use of out-of-school time is related to negative outcomes, positive use of out-of-school time will, ultimately, improve outcomes for youth. Trained community members and youth can deliver research-based experiences for youth. Long-term experiences are more beneficial than short-term experiences for youth, but short-term experiences can attract youth for long-term club experiences.

8. Ultimate goal(s) of this Program

To provide out-of-school time experiences that, by research, is connected to positive outcomes for youth.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	44.1	0.0	0.0	0.0
2008	44.1	0.0	0.0	0.0
2009	44.1	0.0	0.0	0.0
2010	44.1	0.0	0.0	0.0
2011	44.1	0.0	0.0	0.0

Outputs for the Program

13. Activity (What will be done?)

A variety of long and short-term activities conducted in counties will engage Minnesota's youth in long-term relationships and program activities that help them see their potential by:
Learning By Doing
Practicing Leadership
Projects on gardening, animals, photography and much more
Science & Arts Enrichment
Service to Communities
In urban areas, community partnerships will create these experiences, and will also provide youth-to-youth education that makes a difference.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • One-on-One Intervention • Demonstrations • Other 1 (train the trainer/volunteer) • Other 2 (Youth Activities)	• Public Service Announcement • Newsletters • Billboards • TV Media Programs • Web sites • Other 1 (youth activity curricula)

15. Description of targeted audience

The target market for 4-H clubs is youth. In the coming five years, strategic recruitment as well as training for local club leaders, has been designed to double 4-H club membership by 2010 from 26,000 to 52,000. Through training and resources to support staff and volunteers to create quality learning environments in clubs that are inviting, accessible and welcoming to a brader range of Minnesota youth. The Urban Youth Learn audience includes adults working with schools, agencies and organizatiosn and volunteers interested in building sustainable youth programs. Youth leadership programs targets young learners who are working in the context of their neighborhood or community to make a difference.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	0	4500	159000	10
2008	0	4500	169000	10
2009	0	4500	179000	10
2010	0	4500	189000	10
2011	0	4500	189000	10

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

The number of underserved youth participating in 4-H program activities will increase yearly. (Target expressed as a percentage of youth involved in programs from groups targeted as "underserved.")

2007 Target: 10
2008 Target: 12
2009 Target: 15
2010 Target: 17
2011 Target: 20

Output Text

Participants will be satisfied with the out-of-school activities delivered through the 4-H program. (Target expressed as percentage of those who are satisfied.)

2007 Target: 95
2008 Target: 95
2009 Target: 95
2010 Target: 95
2011 Target: 95

Output Text

Well-trained adult volunteers will work with Minnesota's young people. (Target expressed as percentage of volunteered trained in effective practices for working with 4-H youth.)

2007 Target: 75
2008 Target: 80
2009 Target: 85
2010 Target: 90
2011 Target: 95

Output Text

Learning settings (or point of service) in 4-H will meet the essential elements that promote positive youth development. (Target expressed as scores out of 20 items on the 4-H Youth Program Survey.)

2007 Target: 16
2008 Target: 16
2009 Target: 17
2010 Target: 17
2011 Target: 17

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Youth involved in 4-H programs will experience positive outcomes (compared to another statewide sample) in keys of positive youth development including life skills, connection to peers, family, school and community, and engagement in pro-social and risk behaviors.

Outcome Type: Long

2007 Target: 0
2008 Target: 0
2009 Target: 0
2010 Target: 0
2011 Target: 0

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Public commitment to youth in Minnesota is strong. However, as local government face competing demands for local tax dollars and philanthropic dollars, commitment to youth development programs fluctuate. In order to attract and sustain involvement of new cultural groupings, 4-H programs will vary their activities for cultural appropriateness.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention
- Other ()

Description

MN 4-H is made up of layers of local, regional and statewide programming opportunities all across the state. Given the complexity of the organization and the hundreds of program opportunities offered throughout the state, the evaluation strategies are also multi-layered. Short-terms activities are typically evaluated using post-only, retrospective pre-post survey, and pre-post survey strategies. Longer terms efforts will be evaluated using statewide studies, including participation in the national longitudinal study of 4-H Positive Youth Development spearheaded by Tufts University. Statewide studies of a random, representative sample of 4-Hers will also be conducted to coincide with the MN Department of Education's MN Student Survey (this will offer us some ability to compare). This survey is a comprehensive impact survey designed to assess the 8 keys to positive youth development, program satisfaction, and youth development outcomes such as life skills, connection to peers, family, school and community, and engagement in pro-social and risk behaviors. All clubs will continue to complete the annual "4-H Youth Program Survey" designed to assess the learning climate and critical educational processes. In addition, some clubs will participate in the Youth Program Quality Assessment (YPQA) study being conducted with partners at High/Scope Educational Research Foundation. Participant numbers are tracked yearly with 4HPlus, an enrollment software.

22. Data Collection Methods

- Sampling
- Whole population
- On-Site
- Structured
- Observation
- Portfolio Reviews

Description

See above.

1. Name of the Planned Program

Agricultural Business Management

2. Program knowledge areas

- 610 Domestic Policy Analysis 10 %
- 602 Business Management, Finance, and Taxation 20 %
- 604 Marketing and Distribution Practices 20 %
- 603 Market Economics 30 %
- 601 Economics of Agricultural Production and Farm Management 20 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

Agricultural Business Management (ABM) provides farm decision-makers with knowledge about production, marketing and management that they need to improve their farming operation. ABM is also concerned for the whole Minnesota economy. ABM tracks financial performance of Minnesota farms; provides farm management information to farmers, bankers and others concerned with the future of Minnesota agriculture and develops educational programs on and off campus. ABM improves farmers' information and knowledge in areas where strategic and operational management changes can improve progress toward his/her business and family goals.

6. Situation and priorities

Farm records compiled by the University of Minnesota Department of Applied Economics consistently show a net farm income range of over $150,000 between the most profitable and least profitable Minnesota farms each business year. As farm incomes have become more variable, the job of managng a farm has become ever more complex. Today's farm managers are managing more dollars and more people. They are often their own accountants, business analysts, market specialists, and human resource departments, as well as being production specialists. Demand for the information and events developed and provided by ABM increases yearly largely due to the quality of its information and events. The professionals on the team have a priority to increase the information received by farmers and produers, as well as those providing inputs, services and markets to them. Some of the primary issues Minnesota agricultural producers need to address as a result of chages in the agricultural industry and policy include: strategic positioning, tranferring management capabilities, frequent performance monitoring, evaluating new technology, monitoring external factors, managing information, and accountability.

7. Assumptions made for the Program

If farm businesses understand the markets, and have the tools, they will market their products more successfully. They need unbiased and broad-based information to understand their opportunities in the market and be able to effectively access those opportunities.

8. Ultimate goal(s) of this Program

Agricultural Business Management programs will bring in-depth, research-based expertise to critical, cutting edge issues in managing farms. As a result, revenue generated by the agricultural sector in Minnesota will be optimized.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	8.9	0.0	16.3	0.0
2008	8.9	0.0	16.3	0.0
2009	8.9	0.0	16.3	0.0
2010	8.9	0.0	16.3	0.0
2011	8.9	0.0	16.3	0.0

Outputs for the Program

13. Activity (What will be done?)

Through educational events, consultations and media resources, ABM will provide education about:
ag tax issues
land rent data
machinery management
strategic planning and business planning
earning a living on a modern farm
current events in agricultural business management
special purpose technology
ag lending
farm business transfer and estate planning.
Research foci will be on review of policy that relates to ag business management, the farm bill, commodity crops and precision agriculture. Key research studies will include the following:
Research to support improved decision-making in farm planning and financing for farmers and lenders
Research to support improved decision-making in financing for agricultural business owners.
Research on the economic interrelationships in both the domestic and foreign food and agricultural industries.
Development and maintainance an analytical support system that facilitates research and analysis on food, agriucltural and trade policy isses.
Evaluation of supply, demand and policy factors in the U.S. and abroad that influence both short-term and long-term trade prospects and patterns.
Information to help public policy participants and decision makers evaluate issues and increase public understanding of these issues.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Education Class • Workshop • Group Discussion • One-on-One Intervention	• Public Service Announcement • Newsletters • TV Media Programs • Web sites • Other 1 (Software) • Other 2 (Books, Articles and Pubs)

15. Description of targeted audience

Our survey and anecdotal data has shown that Extension and Experiment Station research has a greater impact on agriculture when it directly reaches key information disseminators. Therefore, our target audiences for Ag Business Management programs include:
Minnesota's farmers
Farm business management associations
Agricultural leaders
Other agricultural professionals (e.g., crop consultants)
Farm business management educators
State and federal policy makers

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	8100	4000	0	0
2008	8500	4000	0	0
2009	8900	4000	0	0
2010	9300	4000	0	0
2011	9700	40000	0	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	1
2008	1
2009	1
2010	1
2011	1

18. Output measures

Output Text

Educational events will deliver agricultural business management content. (Target expressed as the number of events.)

2007 Target: 210
2008 Target: 210
2009 Target: 210
2010 Target: 210
2011 Target: 210

Output Text

Consultations will deliver tailored content to business planning. (Target described as numbers of consultations.)

2007 Target: 130
2008 Target: 130
2009 Target: 130
2010 Target: 130
2011 Target: 130

Output Text

Media and publications will provide timely information about current events in agricultural business management. (Target expressed as number of articles or releases disseminated.)

2007 Target: 105
2008 Target: 105
2009 Target: 105
2010 Target: 105
2011 Target: 105

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Participants will shift business practices based on information in Agricultural Business Management programs. (Target expressed as a percentage of those reporting change.)

Outcome Type: Medium

2007 Target: 90
2008 Target: 90
2009 Target: 90
2010 Target: 90
2011 Target: 90

Outcome Text

Winning the Game program participants will increase farm profits with the information that is provided. (Target expressed as millions of dollars of financial impact from the program.)

Outcome Type: Long

2007 Target: 0
2008 Target: 0
2009 Target: 0
2010 Target: 0
2011 Target: 0

Outcome Text

Transfer of farm estates will be done using research-based estate planning. (Target expressed in millions of dollars of estates affected.)

Outcome Type: Long

2007 Target: 0

2008 Target: 0

2009 Target: 0

2010 Target: 0

2011 Target: 0

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

The Agricultural Business Management Educational content constantly adjusts to help farmers address current public policy issues (including, for example, farm bill legislation), current economics and risk management for natural disasters. We expect that these matters will be constantly fluctuating and that the program will continue to be nimble in addressing those issues.

21. Evaluation studies planned

- After Only (post program)
- Time series (multiple points before and after program)

Description

Surveys are distributed six months after program delivery in order to determine how information from agricultural business management programs was used, and the impact on profitability.

22. Data Collection Methods

- Sampling

Description

See above.

1. Name of the Planned Program

Leadership and Civic Engagement

2. Program knowledge areas

- 803 Sociological and Technological Change Affecting Individuals, Fam 50 %
- 608 Community Resource Planning and Development 50 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The primary goal of leadership and civic engagement programs is to improve the quality of community-based leadership and democratic processes. With the power of effective democracies, communities can choose a future and adapt to change. Leadership and civic engagement programs have a strong track record in building leadership capacity and helping communities manage their processes. In the coming five years, the primary goals are: 1) to proactively target LCE programming at regional development; 2) to further strengthen evaluation processes; 3) to develop viable curricula that assure the replicability of sound program delivery; and, 4) to maintain and strengthen the research connections of the work. Three programs currently are aligned with the leadership and civic engagement area of expertise. 1) The U-Lead program creates stronger leadership in communities. 2) The U-Facilitate program offers local citizens, workers and leaders skills and experiences that make meetings and community-based decision-making work better; and 3) The U-Connect program helps communities design and implement public participation processes and become intentional in building bonds among community groups.

6. Situation and priorities

According to a study of community leadership done by Cornell University and the Heartland Institute in 2002, community leaders face a number of specific and complex challenges in modern times, including:
Doing more with less
Mandates from above
The rapids of change and unexpected events
Complexity of issues
Economic realities
Social and cultural unrest
Loss of confidence in institutions
Fear of personal "assassination" as the populace scrutinizes public leadership more harshly.
How can communities address these challenges? Research and case studies document that communities succeed when they realize that, "ultimately, we have to do it ourselves." While support from state government and other outside sources can affect the lives and outcomes of community life, the primary ingredient for success is a communities' ability to make decisions -- to act together. This requires the leadership of an effective democracy.

7. Assumptions made for the Program

Leadership education is known to provide time for personal and community development as potential leaders decide what they can contribute. Providing leadership education will increase the quality and quantity of leadership in communities.
Research-based facilitation design, delivery and education will positively change the process and product of structured gatherings in communities.
Through training and modeling, community decision-makers can learn how to improve the quality and quantity of their engagement with those who have a stake in public decisions.
Community-based assessments can provide revealing information to changing communities.

8. Ultimate goal(s) of this Program

The ultimate goal of leadership and civic engagement programs is to develop local democratic systems that address problems, create positive visions, engage a wide spectrum of community members and enhance the quality of life in communities.

9. Scope of Program

- In-State Extension
- In-State Research
- Multistate Extension

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	11.1	0.0	1.0	0.0
2008	11.1	0.0	1.0	0.0
2009	11.1	0.0	1.0	0.0
2010	11.1	0.0	1.0	0.0
2011	11.1	0.0	1.0	0.0

Outputs for the Program

13. Activity (What will be done?)

The U-Lead, U-Facilitate and U-Connect programs will use multiple interventions to improve the quality of leadership, community meetings and public participation processes, specifically: 1) community-based assessments, 2) workshops, 3) consultation, and 4) long-term cohort groups.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • Demonstrations • Other 1 (Community Coaching) • Other 2 (Community Assessments)	• Web sites • Other 1 (Radio programs, newspaper articl) • Other 2 (Materials dissemination)

15. Description of targeted audience

Leadership and Civic Engagement programs reach out to five primary audiences:
local government agencies, employees and leaders
Chambers of Commerce and economic development asociations
nonprofit organizations and collaborative associations
foundations and their grantees
the natural resources sector

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	5500	4500	0	0
2008	6050	4500	0	0
2009	6500	4500	0	0
2010	6775	4500	0	0
2011	7050	4500	0	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Community cohort groups will meet to develop leadership skills and create civic connections. (Target expressed as number of cohort groups convened.)

2007 Target: 18
2008 Target: 22
2009 Target: 22
2010 Target: 20
2011 Target: 18

Output Text

Community assessments and research projects will help communities understand their strengths related to civic leadership and social capital. (Target expressed as number of local assessments conducted.)

2007 Target: 5
2008 Target: 8
2009 Target: 10
2010 Target: 10
2011 Target: 10

Output Text

Workshops and other structured gatherings will provide communities with increased skills, knowledge and behaviors related to leadership and civic engagement. (Target expressed as number of events.)

2007 Target: 400
2008 Target: 420
2009 Target: 420
2010 Target: 420
2011 Target: 420

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text
Communities and groups will experience a greater quantity of leadership available. (Target expressed as the number of leadership positions held by cohort group members after Extension U-Lead education.)

Outcome Type: Long

2007 Target: 918
2008 Target: 1320
2009 Target: 1320
2010 Target: 1320
2011 Target: 1320

Outcome Text
Each participant in U-Lead programs will report growth including skills, aspirations and knowledge to impact the future of their communities. (Target expressed as percentage of program participants who experience enhancements.)

Outcome Type: Medium

2007 Target: 75
2008 Target: 75
2009 Target: 75
2010 Target: 75
2011 Target: 75

Outcome Text
Communities who engage with Leadership and Civic Engagement programming will create plans that involve relevant stakeholders. (Target expressed as the number of communities.)

Outcome Type: Long

2007 Target: 30
2008 Target: 35
2009 Target: 40
2010 Target: 45
2011 Target: 50

20. External factors which may affect outcomes

- Public Policy changes
- Competing Public priorities
- Competing Programatic Challenges
- Other (Cultural Adaptation)

Description
Greater emphasis on local control and required public participation tied to government funding positively impacts demand for this programming. The LCE program teams want to create cultural adaptations of its programs to reach more Minnesota

immigrants and other underserved audiences. Our evaluation targets may change in order to be more culturally appropriate.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- Case Study
- Other (Educator and community reports.)

Description

Post program assessments (six months or more) will be utilized using the Community Leadership Program Survey developed by the University of Missouri. Organizations and communities who sponsor programs will be assessed through case studies and interviews.

22. Data Collection Methods

- Structured
- Unstructured
- Case Study
- Observation
- Other (surveys and assessments)

Description

the Community Leadership Program Survey is an evaluation tool administered to U-Lead cohort group members after the ending of the cohort group is finished. This survey will collect data about the number of communities impacted by our leadership education and the number of skill enhancements achieved through the program. Community planning assessments will be collected through communication and observation by the intervening Extension educator.

1. Name of the Planned Program

Community Youth Development

2. Program knowledge areas

- 806 Youth Development 70 %
- 805 Community Institutions, Health, and Social Services 30 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The Community Youth Development programs of Extension provide research and consultation that work with communities and support youth development. Community youth development programs work in three ways: 1. Through professional development to community-based youth workers and organizations. 2. Through public dialog and community action that helps communities and policy makers understand the importance of creating opportunities for young people. 3. Through the creation of bridges from university research to youth program staff so that they can apply research to their programs.

6. Situation and priorities

In 2004, a Commission on Out-of-School Time headed by University of Minnesota President Bruininks and staffed by researchers and practitionersvhighlighted the important work that needs to be done in Minnesota to ensure that all young people have opportunities to learn and develop during non-school hours. One of the recommendations from the Commission in the report charged that all communities should be proided ways to understand, assess and increase the quality of age-appropriate opportunities for children and youth. Community Youth Development programs exist to make those opportunities more available, and to improve the quality of such programs where they are available.

7. Assumptions made for the Program

1. Youth programs already exist, but quality is important to the ultimate impact those programs made. 2. Youth workers do not always have the time and money to have access to research that can improve the quality of their work. 3. Education and support can stimulate change in communities so that they offer more opportunities for youth to engage in out of school activities.

8. Ultimate goal(s) of this Program

The ultimate goal is to build strong youth work professionals, strong youth programs, strong organizations, strong communities by building their capacity to develop and support quality, accessible and high impact youth development programs.

9. Scope of Program

- In-State Extension
- Multistate Extension

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	12.8	0.0	0.0	0.0
2008	12.8	0.0	0.0	0.0
2009	12.8	0.0	0.0	0.0
2010	12.8	0.0	0.0	0.0
2011	12.8	0.0	0.0	0.0

Outputs for the Program

13. Activity (What will be done?)

The core program areas for organizing the activities of CYD to achieve our goals include: 1) education and training; 2) community mobilization; 3) community collaboration; and, 4) resource development (professional development materials and tools). Public dialogue and community action will help communities create programs and identify resources before they understand the importance of supporting young people and providing them opportunities. Tools and forums will connect community youth development staff to the latest research on youth development and youth programming.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Education Class • Workshop • Group Discussion • One-on-One Intervention • Other 1 (Neighborhood Collaboratives) • Other 2 (Cohort learning models)	• Public Service Announcement • Web sites • Other 1 (Publication tools)

15. Description of targeted audience

The audience for CYD programs are all persons who interact with youth through community-based programming, and decision-makers who can improve the quality and quantity of opportunities for youth to be involved in out-of-school-time activities. This includes: youth program directors, youth workers, volunteers, teachers, coaches and parents, as well as youth program and school administrators, professionals, elected officials, voters, community collaboratives and policy makers.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	7500	4000	0	0
2008	7800	4250	0	0
2009	8100	4500	0	0
2010	8400	4750	0	0
2011	8700	5000	0	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Community Youth Development Tools will be disseminated.

2007 Target: 500
2008 Target: 550
2009 Target: 600
2010 Target: 650
2011 Target: 700

Output Text

Public offerings will recruit increasing number of registrants involved in youth development. (Target expressed as the percentage of registration capacity filled.)

2007 Target: 80
2008 Target: 83
2009 Target: 86
2010 Target: 90
2011 Target: 95

Output Text

Participating organizations will participate in cohort learning groups. (Target expressed as a percentage of participating organizations.)

2007 Target: 30
2008 Target: 35
2009 Target: 40
2010 Target: 45
2011 Target: 50

Output Text

Individuals representing diverse organizations will participate in networks and collaboratives directly managed by Community Youth Development staff. (Target expressed as number of organizations involved.)

2007 Target: 100
2008 Target: 115
2009 Target: 130
2010 Target: 140
2011 Target: 150

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Minnesota practitioners will use effective resources for youth work professioanls (Targets expressed as numbers of organizations utilizing resources.)

Outcome Type: Medium

2007 Target: 100

2008 Target: 150

2009 Target: 200

2010 Target: 250

2011 Target: 300

Outcome Text

Participants at public educational offerings will report that they increased their knowledge of program effectiveness. (Target expressed as a percentage of participants.)

Outcome Type: Short

2007 Target: 90

2008 Target: 90

2009 Target: 90

2010 Target: 90

2011 Target: 90

Outcome Text

Participants in public education offerings will report that their participation increased their ability to improve impact on youth. (Target expressed as percentage of those in agreement.)

Outcome Type: Short

2007 Target: 75

2008 Target: 75

2009 Target: 75

2010 Target: 75

2011 Target: 75

20. External factors which may affect outcomes

- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges

Description

This program seeks to promote a sustained commitment to youth activities despite political trends and burning issues. However, such trends and tensions will challenge the program to achieve those goals.

21. Evaluation studies planned

- After Only (post program)
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Case Study
- Comparison between locales where the program operates and sites without program intervention

Description

There will be a comparison between program participants and non-participants on core proficiencies of effective youth program and community youth development practice.There will be a case study of Intercultural Education Development (IED) effort and effect.

22. Data Collection Methods

- Mail
- Case Study
- Observation

Description

Communities affected will be surveyed to establish their progress over time.

1. Name of the Planned Program

Family Relations

2. Program knowledge areas

- 802 Human Development and Family Well-Being 100 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The focus is on empowering people through research based information to address the social challenges facing families. Research examines characteristics of family systems to identify impact of environment and decision-making on quality of marriage and family life. Specific research addresses positive family development, and effective services that aim at security for the individual and family unit
The field of parenting education contributes to building family strengths through better family communication, nurturing and respectful discipline practices, strong parent-child relationships and authoritative parenting skills. Extension's family relations programs deliver research-based parent education to parents, and improve the quality and quantity of parenting education through service to practitioners in the field of education, health, social services and law. Three program efforts are included in Extension's family development programs. 1) Parents Forever encourages parents to negotiate their divorce decisions so that children have the optimum opportunity for successful development. 2) Parent educationoffers parents effective parenting tools and strategies that benefit families of infants, school age children, and teenagers. 3) The Families with Teens program seeks to contribute to building family strengths through improving family communication and decision making, strengthening parent-teen relationships, and increasing parental satisfaction and confidence in their parenting role during adolescence.

6. Situation and priorities

One-third of Minnesota families have children under the age of eighteen. Families face critical periods of transition when their parenting decisions can support, enhance, or impede their child's development. Research at the University of Minnesota focuses on how parent behaviors regarding discipline, communication, co-parenting and relationship building can best support child development. Parents receive this information in a variety of ways, depending on their learning styles, the support systems they tap in their communities, and their tendency to seek help. Therefore, finding a variety of conduits for releasing relevant information is important.

7. Assumptions made for the Program

The family is the first intimate setting for the child with the family's role being to equip children with the skills and ways of understanding who he or she is. We can reasonable expect that the child will take those skills, values and understandings and apply them outside of the family.
Parents play a central role in their children's development, and educational efforts (i.e., additional information and support) can enhance or facilitate parent behaviors that influence positive developmental outcomes in children.
Individuals in families influence each other over time and that influence runs from parent to childand from child to parent.
The context within which children develop in addition to family (neighborhoods, faith organizations, historical and social events, culture, race, ethnicity, etc.) is critical to shaping assumptions.
Positive parental behavior leads to healthy outcomes for youth and that results in positive outcomes for the larger community.

8. Ultimate goal(s) of this Program

The ultimate goal of our family relations programs is to see children of parents in our program grow to the optimum developmental outcomes possible. In order to reach that goal, we aspire to create health, human service and education systems where professionals are prepared to work successfully with parents.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	9.2	0.0	5.7	0.0
2008	9.2	0.0	5.7	0.0
2009	9.2	0.0	5.7	0.0
2010	9.2	0.0	5.7	0.0
2011	9.2	0.0	5.7	0.0

Outputs for the Program

13. Activity (What will be done?)

Curriculum, training and research updates will be made available to professionals in the field. Parenting education programs will be delivered through regional educators and trained partners. Research will be disseminated through publications, on-line resources, media and other resources.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • Other 1 (web instruction)	• Public Service Announcement • Newsletters • TV Media Programs • Web sites • Other 1 (Publications) • Other 2 (on-line courses)

15. Description of targeted audience

The program serves professionals in collaborating agencies such as mental health professionals, parent educators, schools, courts, family service agencies, health care settings and others. The program ultimately reaches parents who are divorcing, parents of adolescents and parents of pre-school and school-aged children.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	3500	0	50	0
2008	3675	0	50	0
2009	3850	0	50	0
2010	4025	0	50	0
2011	4200	0	50	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Publications will be distributed.

2007 Target: 25000
2008 Target: 25000
2009 Target: 25000
2010 Target: 25000
2011 Target: 25000

Output Text

Professionals will be trained.

2007 Target: 200
2008 Target: 200
2009 Target: 200
2010 Target: 200
2011 Target: 200

Output Text

Parents will participate in Extension trainings.

2007 Target: 3000
2008 Target: 3000
2009 Target: 3000
2010 Target: 3000
2011 Target: 3000

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text
Increase in knowledge of normative development, parenting practices and helping children through transitions. (Target expressed as a percentage of participants showing increased knowledge.)

Outcome Type: Short
2007 Target: 75
2008 Target: 75
2009 Target: 75
2010 Target: 75
2011 Target: 75

Outcome Text
Increased understanding of issues related to parenting children, adolescents and issues of families related to divorce, separation and stepfamilies. (Target expressed as a percentage of participants reporting increased understanding.)

Outcome Type: Short
2007 Target: 75
2008 Target: 75
2009 Target: 75
2010 Target: 75
2011 Target: 75

Outcome Text
Parents will increase parent/child communication, improve parenting practices, improve parent satisfaction and confidence. (Target expressed as a percenage of those reporting increase.)

Outcome Type: Medium
2007 Target: 75
2008 Target: 75
2009 Target: 75
2010 Target: 75
2011 Target: 75

Outcome Text
Parents will apply strategies that increase resiliency and reduce risk associated with family transitions.

Outcome Type: Medium
2007 Target: 0
2008 Target: 0
2009 Target: 0
2010 Target: 0
2011 Target: 0

Outcome Text

Professionals will maximize resources and develop strategies that address identified needs of families. (Target expressed as percentage of participants reporting outcome.)

Outcome Type: Medium

2007 Target: 50

2008 Target: 50

2009 Target: 50

2010 Target: 50

2011 Target: 50

Outcome Text

There will be economic benefits for individuals, families and society as parenting responsibility increases and children exhibit less risky behavior and acting out.

Outcome Type: Long

2007 Target: 0

2008 Target: 0

2009 Target: 0

2010 Target: 0

2011 Target: 0

Outcome Text

There will be decreased incidences of child abuse and neglect in families where parents have received education and support.

Outcome Type: Long

2007 Target: 0

2008 Target: 0

2009 Target: 0

2010 Target: 0

2011 Target: 0

Outcome Text

Parent education will become more available and accepted in community settings.

Outcome Type: Long

2007 Target: 0

2008 Target: 0

2009 Target: 0

2010 Target: 0

2011 Target: 0

Outcome Text

There will be reduced youth risk behavior and an increase in healthy development of children through healthier parent/child relationships.

Outcome Type: Long

2007 Target: 0

2008 Target: 0

2009 Target: 0

2010 Target: 0

2011 Target: 0

20. External factors which may affect outcomes

- Public Policy changes
- Populations changes (immigration,new cultural groupings,etc.)

Description

Currently, a statute exists which makes divorce education mandatory for parents in conflict who are divorcing. If that policy changes, there would be less demand for Parents Forever. Legislation also impacte the staffing and funding of family relations programming. An increase and decrease in staffing and funding may occur if legislative support for parent education changes. Influxes of new immigrants are affecting cultural adaptations of the program that need to be made. For example, in 2006 Extension was contacted by Hmong elders because the divorce rate in Minnesota's Hmong population was increasing.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Comparisons between program participants (individuals,group,organizations) and non-participants

Description

Minelle?

22. Data Collection Methods

- Mail
- Telephone
- On-Site

Description

Minelle?

1. Name of the Planned Program

Family Resource Management

2. Program knowledge areas

- 806 Youth Development 10 %
- 801 Individual and Family Resource Management 90 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

Family Resource Management provides Extension education on subjects such as: managing a budget, credit and debt, family business, preparation for retirement, culture and money, and teaching children about money. Sound money management is important for people of all income levels and all ages. Three programs make up the Family Resource Management area of expertise: 1) Financial Security in Later Life is a series of workplace trainings that employers can bring to their employees. 2) Resource Management for Daily Life is training for professionals and consumers to develop financial management skills in order to achieve a sense of security and financial stability. 3) Youth and Money provides education for teachers that teach teens about budgeting, income, spending, credit, debt, insurance, and the time value of money.

6. Situation and priorities

According to the National Council on Economic Education: "Americans are experiencing a major change in the way our economy works -- marked by fundamental changes in the marketplace -- outsourcing, global competition, technological change in the workplace, the uncertain future of pensions and social security. Our nation's workforce and citizenry is expected to take on increasing responsibility for their own financial future. ... Financial security begins with building skills and developing practices that foster decision-making to create financial security and stability." There is evidence that the population needs more education to make its financial decisions.
In the 2006 JumpStart survey of high school seniors, the average knowledge of personal finance questions reported a dismal 52.4% correct. With this poor understanding of personal finance, young adults enter adulthood making poorly informed choices in the areas of credit use, lending and consumer purchases. Undergraduates carry an average of three credit cards and have an average credit card debt of $2,327.
More than 50% of working Americans have never even tried to determine how much money they need to save for retirement.
The U.S. savings rate for the first time ever has a negative balance.
The number of personal bankruptcies in the U.S. increased in 2005. New bankruptcy legislation in 2006 will impact the ability and ease of reducing debt responsibility through personal bankruptcy. The impact of this new legislation, for individuals and households, is yet to be determined.
There has been a dramatic increase of housing foreclosures in Minnesota. In Hennepin County alone in 2006, sheriff's foreclosure sales increased 62% from the same period a year ago.

7. Assumptions made for the Program

Partnerships with local nonprofits, educational organizations, social service programs and financial institutions can expand the outcomes of financial literacy programming.
Some populations in need of financial literacy may be reluctant to take advantage of traditional classroom settings; therefore, creative outreach and partnership strategies should be used.
Financial literacy must be translated for language and culture so that immigrant and non-english speaking residents can take advantage of it.
Workplace education creates the potential for dual outcomes. It can meet the employer's need for productivity and the workers' need for retirement savings knowledge.

8. Ultimate goal(s) of this Program

The ultimate goal is that families and individuals increase their wealth and financial security by making sound decisions about consumption, debt, retirement, and daily finances.
To support this goal, specific MAES research addresses families' ability to cope with financial strain and at the same time, cope

with the reduction of programs and support for families. Research addresses effective services that aim at security for the indiviudal and family unit, as well as relationships between the viability of rural family businesses and family functioning.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	11.1	0.0	3.1	0.0
2008	11.1	0.0	3.1	0.0
2009	11.1	0.0	3.1	0.0
2010	11.1	0.0	3.1	0.0
2011	11.1	0.0	3.1	0.0

Outputs for the Program

13. Activity (What will be done?)

Practitioner workshops will be held to help partnering organizations deliver education.
Workshops and trainings will be held in community-based settings for each of the financial literacy topics.
Worksite workshops will be taught.
Publications will support programming.
Media will be used to disseminate timely research and information.
Curricula will be developed and adapted for language and culture as needed.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • One-on-One Intervention • Demonstrations • Other 1 (Training of trainers) • Other 2 (webcast and other multi-media)	• Newsletters • Web sites • Other 1 (Radio programs, newspaper articl) • Other 2 (Publications)

15. Description of targeted audience

Our audiences include the following: For youth and money: adolescents moving into independent living; teachers k-12, professional staff-credit union representatives, college staff and faculty, college students and youth.For financial security in later life: employees at worksites; some community non-profit groups and individuals who utilize on-line website resources and self-study modules. For resource management for daily life programs: the general public; individuals and families who seek knowledge and skills by choice or mandate; professionals seeking to enhance knowledge; public and private agencies, organizations and businesses seeking training to enhance their delivery of resource management programs.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	5000	14000	70	2000
2008	5250	14000	75	2050
2009	5500	14000	75	3000
2010	5750	14000	80	3025
2011	6000	14000	82	3050

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Training will be held for trainers in other organizations so that they can deliver education to their constituents. (Target expressed as the number of events delivered.)

2007 Target: 235
2008 Target: 240
2009 Target: 245
2010 Target: 250
2011 Target: 255

Output Text

Community-based workshops will be held for individuals and families. (Target expressed as the number of events delivered.)

2007 Target: 360
2008 Target: 360
2009 Target: 360
2010 Target: 360
2011 Target: 360

Output Text

Curricula and guides will be distributed to practitioners.

2007 Target: 2000
2008 Target: 2000
2009 Target: 2000
2010 Target: 2000
2011 Target: 2000

Output Text

Outreach efforts will educate employers about financial security needs of employees and provide opportunities for on-site workshops. (Target expressed as number of employing businesses reached.)

2007 Target: 175
2008 Target: 175
2009 Target: 150
2010 Target: 125
2011 Target: 100

Output Text

Twenty percent (20%) of targeted employers will schedule workshops. (Target expressed as number of workshops held yearly.)

2007 Target: 35
2008 Target: 35
2009 Target: 30
2010 Target: 25
2011 Target: 20

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Individuals and families of all cultures who participate in Resource Management programming will report that they have changed behavior related to the targeted financial management goal. (Target expressed as a percentage of participants.)

Outcome Type: Medium

2007 Target: 20
2008 Target: 23
2009 Target: 25
2010 Target: 28
2011 Target: 30

Outcome Text

Participants in teacher trainings for Youth and Money will report increased use of quality financial literacy program tools. (Target expressed as a percentage of participants.)

Outcome Type: Short

2007 Target: 30

2008 Target: 35

2009 Target: 40

2010 Target: 45

2011 Target: 50

Outcome Text

Teachers will increase their use of research-based curricula in financial management. (Target expressed as a percentage of teachers indicating increase in use.)

Outcome Type: Medium

2007 Target: 30

2008 Target: 35

2009 Target: 40

2010 Target: 45

2011 Target: 50

Outcome Text

Individuals and families of all cultures who participate in in Resource Management programming will report that they have increased knowledge related to the targeted financial management goal. (Target expressed as a percentage of participants.)

Outcome Type: Short

2007 Target: 30

2008 Target: 33

2009 Target: 35

2010 Target: 38

2011 Target: 40

Outcome Text

Employees will be more aware that they must plan now for security in later life. (Target expressed as percentage of program participants.)

Outcome Type: Short

2007 Target: 70

2008 Target: 70

2009 Target: 70

2010 Target: 70

2011 Target: 70

Outcome Text

Employees who participate in financial security in later life workshops will increase their knowledge, confidence and skills that support their success in planning for financial security in later life. (Target expressed as a percentage of participants.)

Outcome Type: Medium

2007 Target: 70

2008 Target: 70

2009 Target: 70

2010 Target: 70

2011 Target: 70

Outcome Text

Young adults will implement changes in resource management behaviors after studying High School Financial Planning curriculum content. (Target expressed as percentage of participants.)

Outcome Type: Medium

2007 Target: 40

2008 Target: 40

2009 Target: 42

2010 Target: 45

2011 Target: 48

Outcome Text

4-H Consumer Contest participants will commit to applying the decision-making model in real life situations. (Target expressed as percent of participants.)

Outcome Type: Short

2007 Target: 20

2008 Target: 25

2009 Target: 30

2010 Target: 35

2011 Target: 40

Outcome Text

College students will report increased financial skills related to financial management, tenant issues, credit/debt and identity theft issues. (Target expressed as a percentage of participants.)

Outcome Type: Short

2007 Target: 10

2008 Target: 12

2009 Target: 12

2010 Target: 14

2011 Target: 15

20. External factors which may affect outcomes

- Economy
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Greater economic challenges create more of a challenge to financial literacy. (e.g., health care costs and availability, unemployment rates, costs of child care, cost of energy, cost of housing, war and rising interest rates.) Greater competition for attention to other issues in community-based institutions could decrease the amount of financial literacy training that exists. As new populations come to Minnesota, new adaptations of financial literacy program will be developed.

21. Evaluation studies planned

- Retrospective (post program)
- Before-After (before and after program)
- Time series (multiple points before and after program)

Description

Surveys for resource management for daily life will assess strengths, skills and needs of clients, recognition of effects of culture on resource management, promotion of money management skill building and sharing of best practices in financial management behavior. This data will be gathered immediately following train-the-trainer programs, within 12 months following or

as an end-user summary. Youth and money programs will use end-of-event evaluation, as well as longitudinal evaluations utilizing web-based surveys.

22. Data Collection Methods

- Mail
- On-Site
- Structured
- Other (email / web surveys)

Description

Onsite data collection is used to measure retrospective knowledge/skill gain.Web-based (Survey Monkey) surveys will collect post-event information.Focus group interviews will be conducted to assess cultural appropriateness of curriculum adaptations.

1. Name of the Planned Program

Environmental Science Education

2. Program knowledge areas

- 903 Communication, Education, and Information Delivery 60 %
- 135 Aquatic and Terrestrial Wildlife 20 %
- 136 Conservation of Biological Diversity 20 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The mission of the Environmental Science Education work team is to employ the unique resources of the University of Minnesota to protect and enhance Minnesota's unique natural resources and environment through improved environmental education. ESE targets natural resource professionals, teachers and citizens who are engaged in providing environmental science education. Three programs are core to the Environmental Science Education work:1) The Master Naturalist Program reaches community volunteers and citizens who can disseminate environmental science education in their communities; 2) Best Practices in Field Days reaches natural resource professionals and teachers to improve the quality of their environmental science offerings; and 3) Educational Programming for Youth on the White Earth Reservation brings environmental science education directly to Native American youth.

6. Situation and priorities

The State Plan for Environmental Education (Lederman 2000) outlines legislated goals of environmental science education, stating that citizens should 1) understand ecological systems, 2) understand cause and effect relationships between human attitudes and behavior and the environment, 3) be able to evaluate alternative responses to environmental issues before deciding on courses of action, and 4) understand th effects of multiple uses of the environment (Minn. Statute 115.073, 1998). To assess citizen's level of knowledge in these areas, the Minnesota Office of Environmental Assistance conducted a survey of adult environmental knowledge, attitudes and behavior (Murphy 2002, 2005). The major findings were that 65% of Minnesotans believe they are knowledgeable about the environment but 46% have less than average knowledge, compared to a national pool. The task of education that connects research-based information to citizens can happen in schools, in communities and in professional settings.

7. Assumptions made for the Program

1) Quality of environmental science education can be improved through connections between research-based information and key audiences. 2) The quantity of environmental science education can be increased by expanding the number of ambassadors for environmental education. 3) Environmental science education will lead to greater care and maintenance of Minnesota's ecosystems.

8. Ultimate goal(s) of this Program

The mission of the Environmental Science Education work team is to employ the unique resources of the University of Minnesota to protect and enhance Minnesota's unique natural resources and environment through improving environmental education.

9. Scope of Program

- In-State Extension
- Multistate Extension

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	4.4	0.0	0.0	0.0
2008	4.4	0.0	0.0	0.0
2009	4.4	0.0	0.0	0.0
2010	4.4	0.0	0.0	0.0
2011	4.4	0.0	0.0	0.0

Outputs for the Program

13. Activity (What will be done?)

Extension will improve the quality and increase the quantity of environmental science education by: 1) training teachers and field day leaders best practices for managing environmental science education programs; 2) training volunteers to deliver environmental science education in community settings; and, 3) training Native American Youth through culturally adapted summer programs.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • One-on-One Intervention • Demonstrations • Other 1 (Train the trainer)	• Newsletters • Web sites

15. Description of targeted audience

Environmental Science Education programs reach: 1) Concerned citizens and volunteers who are willing to be trained and serve in a variety of roles as citizen teachers and scientists. 2) Minnesota professionals from within Extension, the Minnesota Department of Natural Resources, Soil and Water Conservation Districts, US Fish and Wildlife Services, Health and Human Services Departments, Environmental Sciences, the public schools and others involved in environmental science education programs. 3) Youth on the White Earth Reservation in Northwest Minnesota.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	650	3000	200	4500
2008	680	3150	210	4775
2009	710	3300	220	5000
2010	740	3450	230	5225
2011	770	3600	240	5450

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Through training and other communications, volunteers, educators adn natural resource professionals will be prepared to deliver research-based environmental science education programs. (Measure expressed as number of Master Naturalists trained and supported.)

2007 Target: 265
2008 Target: 445
2009 Target: 500
2010 Target: 550
2011 Target: 600

Output Text

White Earth Reservation youth will graduate from a four week summer program that includes environmental science education. (Target expressed as a percentage of students graduating.)

2007 Target: 75
2008 Target: 75
2009 Target: 75
2010 Target: 75
2011 Target: 75

Output Text

Recruitment strategies for Environmental Science Education programs for adults will reach under-represented audiences. (Target expressed as a percentage of total audiences served.)

2007 Target: 10
2008 Target: 10
2009 Target: 10
2010 Target: 10
2011 Target: 10

Output Text

All ESE modules and trainings will be developed, tested and finalized. (Target expressed as number of modules and trainings completed that year.)

2007 Target: 1
2008 Target: 2
2009 Target: 3
2010 Target: 0
2011 Target: 0

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Within a year of environmental science education instructor training (i.e., Master Naturalist and Best Practices for Field Day Trainings), educators and community-based instructors will use the research-based educational methods in environmental science education delivery. (Target expressed as a percentage of participants.)

Outcome Type: Medium

2007 Target: 140
2008 Target: 140
2009 Target: 140
2010 Target: 140
2011 Target: 140

Outcome Text

Minnesotans will have increased opportunities to participate in natural history learning activities. (Target measure reflects increases in number of events available.)

Outcome Type: Medium

2007 Target: 50
2008 Target: 50
2009 Target: 50
2010 Target: 50
2011 Target: 50

Outcome Text

Master Naturalists will become more knowledgeable about natural history. (Measure expressed as a percentage of knowledge gain.)

Outcome Type: Short

2007 Target: 20
2008 Target: 20
2009 Target: 20
2010 Target: 20
2011 Target: 20

Outcome Text

Native American youth will increase their academic performance on standardized achievement tests following the four week ESE program. (Target expressed as a percentage of increase.)

Outcome Type: Medium

2007 Target: 5

2008 Target: 5

2009 Target: 5

2010 Target: 5

2011 Target: 5

20. External factors which may affect outcomes

- Public Policy changes
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Fundraising is being done to continue some elements of environmental science education. Field Days programs and White Earth Reservations programs are contingent on such funding, and additional evaluation can be done with that funding. A change in public policy and educational priorities may challenge Extension to find partners and volunteers. Demographic shifts may change where we target our participant marketing and whether we adapt the program to reach new cultures.

21. Evaluation studies planned

- Retrospective (post program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants

Description

ESE evaluations will guide the direction of the projects and assess effectiveness in meeting objectives. Front-end evaluations helped to define audience and partners. Formative evaluation will be carried out during the development and early implementation phases of the programs (2006 - 2010) and results will inform and refine programs. The dominent features of our evaluations are: 1) assessing participants' achievements, including potential to impact large numbers of people through volunteer and professional activities; 2) assessing impact on volunteers and professionals; 3) assessing the quality of materials. We will use a mixed-methods approach (Greene & Caracelli 2002) including surveys, observations, interviews and expert panels and including stakeholders at all levels.

22. Data Collection Methods

- Whole population
- Structured
- Case Study
- Observation
- Portfolio Reviews
- Tests

Description

{NO DATA ENTERED}

1. Name of the Planned Program

Water Resource Management and Policy

2. Program knowledge areas

- 605 Natural Resource and Environmental Economics 20 %
- 403 Waste Disposal, Recycling, and Reuse 25 %
- 133 Pollution Prevention and Mitigation 30 %
- 111 Conservation and Efficient Use of Water 25 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

MAES research is designed to develop a systematic, comprehensive and scientific approach for addressing agricultural profitability and non-point source pollution reduction in the Minnesota River basin.
Extension water resource management programs deliver education and consultation with community members, professionals and local institutions so that they are better stewards of Minnesota's water. Water Resource Management programs include three core programs:
The stormwater education program assists local government in protecting and improving water resources by improving urban land use decision-making, improving stormwater practices and educating residents about new clean water practices.
The Shoreland Education program provides information, practical experience and resources for people interested in implementing or promoting shoreland stewardship so that they can improve shoreland water quality; and
The Onsite Sewage Treatment Program actively promotes the use of decentralized sewage treatment methods to provide wastewater treatment for rural areas and small communities.

6. Situation and priorities

Minnesota waters are part of the state's identity, pride, and a focal point of much of its tourism industry. Research and education focuses on the agricultural impacts on our lakes and rivers, and addressing other threats and challenges such as invasive species. The Minnesota River, for example, is considered one of the 20 most endangered waterways in America. Pollution from controllable man-made sources are an obstacle to keeping Minnesota's waters fishable and swimable. The pressure on water resources is growing, as the number of homes on Minnesota lakes grew 74% from 1967 to 1982. After assessing 14% of the state's lakes and 8% of the state's rivers, the Minnesota Pollution Control Agency's Impaired Waters Program found 37% of the lakes and 40% of the rivers to be impaired. The State of Minnesota has responded with requirements that, for example, local units of government reduce stormwater pollution and control how sewage treatment is done and maintained. However important this legislation is, it is the decisions that homeowners, landowners and small communities make that will improve the quality of water. Additionally, since 1997 the US EPA has been actively promoting the use of decentralized sewage treatment methods to provide wastewater treatment for rural areas and small communities. Communities and individuals can use research-based education and consultation as they make the decisions that will create safer water in Minnesota.

7. Assumptions made for the Program

Pollution prevention requires an educational process in which those who manage land learn new methods and approaches.
Property owners care about the quality of the water around them and want to maintain a pollution-free community.
Changing the norms, rules and behavior of community members will have an effect on pollution control.
Professionals need high-quality education in order to be updated in new research about their work.

8. Ultimate goal(s) of this Program

To maintain and improve the quality of Minnesota's waters and the health of Minnesota residents.
Research goals:
Develop a framework for describing and taking inventory of characteristics of the Minnesota River basin that affect non-point source pollution, agricultural management practices and their potential for reducing non-point source pollution.
Develop an inventory for research on the risk associated with adopting crop mangement practices that can reduce non-point

source pollution.
Develop agroforestry practices that mitigate non-point pollution problems.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	9.7	0.0	8.9	0.0
2008	9.7	0.0	8.9	0.0
2009	9.7	0.0	8.9	0.0
2010	9.7	0.0	8.9	0.0
2011	9.7	0.0	8.9	0.0

Outputs for the Program

13. Activity (What will be done?)

We will:
Provide land management / water quality education, stormwater management practice assessment, and local government stormwater education and support.
Provide education and consultation for professionals, small communities and homeowners about how to provide and maintain sewage treatment.
Provide education, practical experience and resources about how to protect and improve the shoreland, environment and lake/stream water quality.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • One-on-One Intervention	• Newsletters • Web sites • Other 1 (Publications) • Other 2 (DVDs)

• Demonstrations • Other 1 (consultations)	

15. Description of targeted audience

Communities likely to use the stormwater education program are those within the Twin Cities' third tier of urban development, communities in Minnesota's lake districts and the western Lake Superior Basin. We will reach those communities through local government and elected and appointed officials and their staffs. Local government engineers and planners, consulting engineers, planners and architects are also targeted as they help communities make decisions that impact Minnesota's waters. Homeowners are a key audience -- whether they be shoreland property owners, lake association members, the horticulture industry, volunteer groups, or owners of on-site septic systems. Professionals are also a key audience as their professions interface with the water resources. These include natural resource professionals, real estate professionals, the hospitality industry or professionals who have access to homes and communities with on-site sewage treatment programs.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	11000	19500	2500	0
2008	11000	19500	2500	0
2009	11000	19500	2500	0
2010	11000	19500	2500	0
2011	11000	19500	2500	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Place useful information about shoreland management into multiple web links, printed products and media. (Target expressed as numbers of products created per year.)

2007 Target: 10
2008 Target: 10
2009 Target: 10
2010 Target: 10
2011 Target: 10

Output Text

Workshops, seminars, and presentations will educate community members and professionals about strategies that provide wastewater treatment for their community at a reasonable cost in a way that is consistent with community values. (Target expressed as number of events.)

2007 Target: 125
2008 Target: 125
2009 Target: 125
2010 Target: 125
2011 Target: 125

Output Text

Provide workshops on water quality, stormwater issues and shoreland management, revegetation and use of plants to maintain shoreland structures. (Target expressed as number of events.)

2007 Target: 30
2008 Target: 30
2009 Target: 30
2010 Target: 30
2011 Target: 30

Output Text

Coordinate shoreland and wastewater treatment demonstration projects that provide hands-on learning opportunities and add to educational goals.

2007 Target: 8
2008 Target: 8
2009 Target: 8
2010 Target: 8
2011 Target: 8

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Residents will know: 1) Where stormwater goes; 2) Major stormwater pollutants and their impact and 3) Three things they can personally do to prevent pollution. (Measure expressed as percentage of residents in targeted communities.)

Outcome Type: Short

2007 Target: 80
2008 Target: 80
2009 Target: 80
2010 Target: 80
2011 Target: 80

Outcome Text

Targeted communities will create accessible, understandable and useful reports and protocols. (Target expressed as a percentage of targeted communities.)

Outcome Type: Medium

2007 Target: 100
2008 Target: 100
2009 Target: 100
2010 Target: 100
2011 Target: 100

Outcome Text

Workshop participants will use information from shoreland education programming to provide education to 25 additional people, creating a multiplier effect. (Target expressed as a percentage of workshop participants.)

Outcome Type: Short

2007 Target: 50

2008 Target: 50

2009 Target: 50

2010 Target: 50

2011 Target: 50

Outcome Text

Shoreland education workshop participants will practice one or more of five lake/river friendly landscaping behaviors. (Target expressed as a percentage of workshop participants.)

Outcome Type: Medium

2007 Target: 50

2008 Target: 50

2009 Target: 50

2010 Target: 50

2011 Target: 50

Outcome Text

Homeowners will modify or change their habits regarding home water and product use to better protect their onsite septic systems. (Measure expressed as a percentage of those evaluated.)

Outcome Type: Medium

2007 Target: 60

2008 Target: 60

2009 Target: 60

2010 Target: 60

2011 Target: 60

Outcome Text

Small communities will develop a viable plan for onsite sewage treatment--plans that are affordable and address onsite sewage treatment. (Target expressed as number of communities per year.)

Outcome Type: Medium

2007 Target: 3

2008 Target: 3

2009 Target: 3

2010 Target: 3

2011 Target: 3

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Government Regulations
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)

Description

If the regulations that mandate planning and education for stormwater runoff and onsite treatment change, communities will no longer have an incentive to engage in this programming. As population changes happen in communities, the types of education delivered requires cultural and language relevance. Weather extremes may change the program priorities when they influence

lakes and streams.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Case Study

Description

Evaluation will be at two levels: awareness surveys made of residents to see if program goals were met, and direct interviews with local government staff to see if the water resource programs provided are useful and effective.

22. Data Collection Methods

- Sampling
- Mail
- Telephone
- Unstructured

Description

The evaluation of residents will be done in conjunction with environmental knowledge surveys regularly conducted by Metropolitan Council and the Minnesota Pollution Control Agency. Evaluation of local government staff will be done through direct interviews with staff of 15% of targeted municipalities. Shoreland education evaluation will use self-assessment on surveys six - nine months after workshop delivery. The On-site Sewage Treatment Program will conduct follow-up evaluations 3 - 6 months after a program to assess changes made by participants, retention of learning and community progress.

1. Name of the Planned Program

Natural Resources Management and Utilization

2. Program knowledge areas

- 125 Agroforestry 15 %
- 124 Urban Forestry 25 %
- 133 Pollution Prevention and Mitigation 10 %
- 123 Management and Sustainability of Forest Resources 50 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

Research in natural resources sponsored by MAES is carried out in forest resources, fisheries and wildlife and conservation biology. Other departments also address natural resources issues, including entomology, plant pathology, horticulture, plant biology, soil, water and climate, and applied economics.
Natural Resource and Management Utilization (NRMU) Programs help citizens, landowners and natural resource professionals make sound, well-informed decisions that affect the sustainability of their natural resources now and for future generations. NRMU programs are specially designed to address issues on forested, agricultural and urban landscapes. Services are delivered through workshops, learning groups, demonstration research, publications and use of citizen-to-citizen training.

6. Situation and priorities

Minnesota has nearly 17 million acres of forests that provide a wide variety of goods and services to residents of the state. The use, mangement and protection of these resource which range from intensive management for fiber production to wilderness designation) are dependent on wise and informed decisions by policy makers, citizens, landowners. If such decisions are to further the landowner and the public's interests, they must be advised by accurate, authoritative scientific and technological information.
Farmers, loggers, natural resource managers, land owners and urban dwellers make decisions every day that directly affect the condition and future of Minnesota's trees and forests. Emerging priority issues in the coming five years include changing land ownership and land use, changing demographics of landowners, changing natural resource economies, and the relationships between natural resources and water quality.

7. Assumptions made for the Program

Broad adoption of innovative, research-based strategies is necessary to address the priority issues. An engaged citizenry can both inform the process and implement strategies that address priority issues. Landowners and farmers can diversify revenue sources through research-based management of product development on their land.

8. Ultimate goal(s) of this Program

Extension goals:
The goals of Natural Resource and Management Utilization programs are that future generations have full access to healthy and abundant natural resources. This will be accomplished through:
promotion of sustainable harvesting practices;
increased utilization of natural resources on farms and in forests;
adoption of sound, well-informed natural resource and management; and,
engaged citizens who care for rural and urban forests and trees.
Research goals:
Improve understanding of controls on forest composition, diversity and function
Improve understanding of northern Minnesota forest ecosystems and develop improved management techniques
Investigate the biology and control of forest microbes and determine their importance to forest health and sustainable ecosystem functioning
Better understand the decisions that affect the integrity and biological diversity of the ecosystem, and linkages between biosphere, microclimate and global climate

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	7.1	0.0	75.0	0.0
2008	7.1	0.0	75.0	0.0
2009	7.1	0.0	75.0	0.0
2010	7.1	0.0	75.0	0.0
2011	7.1	0.0	75.0	0.0

Outputs for the Program

13. Activity (What will be done?)

New research and education is delivered to key audiences through face-to-face workshops, master volunteer programs, print and digital publications, multi-media, newsletters, conferences, community events and the internet. Program business plans deal specifically with NRMU in agricultural, forest and urban landscapes. NRMU programs cover a wide range of topics including forest recreation, timber harvesting, invasive species, forest products, urban forestry, windbreak and shelterbelt development, wood processing, forest-based culinary products, other non-timber forest products, wildlife management, forest ecology and silviculture.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • One-on-One Intervention • Demonstrations • Other 1 (community-based research) • Other 2 (community events)	• Newsletters • Web sites • Other 1 (publications) • Other 2 (dvds and cd-roms)

15. Description of targeted audience

Primary audiences: Farmers and woodland owners, wood processors, volunteers, natural resource and green industry professionals, local units of government, parks and recreation departments, forestry departments, soil and water conservation districts and state agency personnel. Secondary audiences: Investors, loggers, crop consultants

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	1750	30000	150	500
2008	1850	30000	150	500
2009	2100	30000	150	500
2010	2300	30000	150	500
2011	2500	30000	150	500

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	1
2009	1
2010	0
2011	0

18. Output measures

Output Text

Workshops will train landowners and volunteers in trees and woodlands topics. (Target expressed as number of events.)

2007 Target: 50
2008 Target: 50
2009 Target: 50
2010 Target: 50
2011 Target: 50

Output Text

Through research demonstration projects and workshops, promote production, management and utilization of woody biomass and other domestic renewable energy sources. (Target expressed as number of events.)

2007 Target: 5
2008 Target: 6
2009 Target: 7
2010 Target: 8
2011 Target: 9

Output Text

Master volunteer programs will prepare volunteers who commit time to care for their forest and share that knowledge with others. (Target expressed as numbers of volunteer hours generated each year.)

2007	Target:	3000
2008	Target:	3000
2009	Target:	3000
2010	Target:	3000
2011	Target:	3000

Output Text

Workshops for professionals will prepare those in the forestry and logging business with research-based information. (Target expressed as number of workshops available.)

2007	Target:	10
2008	Target:	10
2009	Target:	10
2010	Target:	10
2011	Target:	10

Output Text

Learning opportunities will promote diversification of agricultural landscapes, including establishment of woody perennial crops for wellhead and water quality protection. (Target expressed as number of face-to-face interactions.)

2007	Target:	5
2008	Target:	6
2009	Target:	7
2010	Target:	8
2011	Target:	9

Output Text

Print and digital publications will provide answers to questions about sustainable management of Minnesota's natural resources. (Target expressed as number of publications distributed.)

2007	Target:	1000
2008	Target:	1000
2009	Target:	1000
2010	Target:	1000
2011	Target:	1000

Output Text

Electronic commons will bring together natural resource businesses into internet-based learning communities that diversify local economies. (Target expressed as number of businesses that participate.)

2007	Target:	5
2008	Target:	6
2009	Target:	7
2010	Target:	8
2011	Target:	9

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Informed land owners will manage a significant number of acres of Minnesota land effectively. (Target expressed as number of acres.)

Outcome Type: Medium

2007 Target:	60000
2008 Target:	60000
2009 Target:	60000
2010 Target:	60000
2011 Target:	60000

Outcome Text

Landowners, woodland owners and farmers will increase their planting of woody perennial and other crops to diversify their agricultural landscapes. (Target expressed as number of individuals who state an intention to diversify.)

Outcome Type: Medium

2007 Target:	20
2008 Target:	25
2009 Target:	30
2010 Target:	35
2011 Target:	40

Outcome Text

Because of participation in Extension courses, urban forestry professionals and paraprofessionals will report having changed their tree care behaviors that promote healthy urban forests. (Target expressed as # of participants who report change.)

Outcome Type: Medium

2007 Target:	100
2008 Target:	100
2009 Target:	110
2010 Target:	120
2011 Target:	130

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Furthering the goals of the NRMU program relies upon the public's perception that there are good incentives to diversify their income sources, along with the public's interest in maintaining the quality of natural resources. Natural disasters and government regulations would change the content of the courses provided by NRMU programming.

21. Evaluation studies planned

- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study

Description

Evaluation will focus on basic formative and summative techniques. We will look at number of acres controlled by program participants and stated intentions for those acres. In some cases, we will conduct retrospective observations of behavior change. Case studies will describe the nature of behavioral change. If funding becomes available, a comparison of behavior of participants and non-participants will be done.

22. Data Collection Methods

- Sampling
- Telephone
- On-Site
- Unstructured
- Case Study

Description

Data is collected through onsite formative and summative means, and observations of program participants.

1. Name of the Planned Program

Housing Technology

2. Program knowledge areas

- 804 Human Environmental Issues Concerning Apparel, Textiles, and Res 100 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The Housing Technology Program of the University of Minnesota Extension Service delivers courses and provides the tools that secure good air quality in new homes, or mitigates problems in existing homes. Educational partners come from government, industry and non-profit organizations. Together, these courses identify the extent and cause of the major structural and environmental problems in housing. This serves housing professionals so that they can ensure the quality of new and existing homes to their customers. This also helps the housing consumer/investor be better informed on home-buying decisions. MAES research supporting outreach education on housing in developing new knowledge and understanding of building systems.

6. Situation and priorities

A host of home air pollutants can impair the health of residents, creating asthma, allergies, bronchitis, carbon monoxide poisoning, lead poisoning, and more. Examples of harmful housing substances include asbestos, biological contaminants, chemicals, combustion pollutants, lead, mold, and radon. Maintaining and building durable, healthy and affordable housing requires knowledgeable housing professionals and consciencious home buyers.

7. Assumptions made for the Program

Public policy alone cannot assure indoor air quality. Creating a culture of conscienciousness about air quality among both buyers and sellers will improve the quality of Minnesota's housing stock.

8. Ultimate goal(s) of this Program

To mitigate health risks through the reduction of indoor environmental risks, while improving the quality and durability of Minnesota's housing stock.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	1.3	0.0	2.6	0.0
2008	1.3	0.0	2.6	0.0
2009	1.3	0.0	2.6	0.0
2010	1.3	0.0	2.6	0.0
2011	1.3	0.0	2.6	0.0

Outputs for the Program

13. Activity (What will be done?)

Courses will be offered in Minnesota and across the United States in partnership with the building industry and its constituents. Ongoing research will continue to increase the quality and quantity of these educational opportunities. The following topics are core to our Housing Technology Programs: Indoor Air Quality in Residential Settings; Moisture Control and Mold; Radon Measurement, Radon Mitigation, and custom courses on new and emerging subjects.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Other 1 (certifications) • Other 2 (on-line courses)	• Newsletters • Web sites

15. Description of targeted audience

The overall target audience for this information is builders, remodelers, contractors, mitigators, real estate brokers and agents, lenders, inspectors, public health professionals and others involved with avoiding and resolving problems in homes.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	872	5700	0	0
2008	914	5700	0	0
2009	956	5700	0	0
2010	998	5700	0	0
2011	1040	5700	0	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Educational courses will be delivered to the target audiences.

2007 Target: 65
2008 Target: 65
2009 Target: 65
2010 Target: 65
2011 Target: 65

Output Text

New research will result in the development of new and revised educational materials. (Target expressed as the number of new or revised curriculum materials.)

2007 Target: 5
2008 Target: 5
2009 Target: 5
2010 Target: 5
2011 Target: 5

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Improve the durability of new homes by working with builders. (Target expressed as the number of new homes affected.)

Outcome Type: Long

2007 Target: 1000
2008 Target: 1000
2009 Target: 1000
2010 Target: 1000
2011 Target: 1000

Outcome Text

Improve the availability of healthy and affordable housing through the mitigation of indoor environmental risks. (Target expressed as number of homes affected.)

Outcome Type: Long

2007 Target: 1000

2008 Target: 1000

2009 Target: 1000

2010 Target: 1000

2011 Target: 1000

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)

Description

Natural disasters could increase or change the amount of content that needs to be provided. If government regulations no longer support the program in giving incentive to builders to make homes safe, the market for the program could decrease. Population changes will generate a demand for programming in additional languages.

21. Evaluation studies planned

- After Only (post program)

Description

Evaluation of progam is done collaboratively with the housing industry, which indicates whether standards are being addressed and that they are in compliance with government regulation as a result of educational inputs.

22. Data Collection Methods

- Sampling
- Whole population
- Mail
- Telephone
- On-Site
- Structured
- Unstructured
- Case Study
- Observation
- Portfolio Reviews
- Tests
- Journals

Description

Evaluation of progam is done collaboratively with the housing industry, which indicates whether standards are being addressed and that they are in compliance with government regulation as a result of educational inputs.

1. Name of the Planned Program

Food Safety Education

2. Program knowledge areas

- 501 New and Improved Food Processing Technologies 40 %
- 504 Home and Commercial Food Service 30 %
- 503 Quality Maintenance in Storing and Marketing Food Products 30 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The mission of Food Safety education is to provide research-based food safety education to Minnesota food service establishments, non-profit community events, schools, processing facilities, care facilities, homes and home-based businesses and to increase the safety of fish and other food products grown, caught, prepared or preserved in Minnesota. This is being accomplished through: 1) Food Safety Certification programs for Food Services; 2) Food Safety Training for food handlers; 3) Food Safety Education through distributed materials to the general public and 4) Development and coordination of training and inspection for food industry personnel.
Research to support these outreach programs investigate food production and processing practices, food safety and food quality issues.

6. Situation and priorities

An average of 39 foodborne outbreaks occur every year in Minnesota, involving more than 600 persons. Fifty percent of the food dollar is spent on meals prepared by the food service industry. The majority of foodborne outbreaks in Minnesota is related to improper handling in these food service situations. Emerging trends to which the food service industry must adapt include food allergies, food irradiation and foodborne illness. In community based and care settings, similar concerns arise with less professional resources available for trainings and standards for food preparation.

7. Assumptions made for the Program

Interventions in public food service settings will control the conditions under which food borne illnesses occur. For-profit and non-profit food service settings benefit from becoming trained in food service because the reputations of their institutions and industry will be strengthened. The general public seeks information about food safey from timely, responsive mediums rather than workshop or certification settings.

8. Ultimate goal(s) of this Program

The ultimate goal is to prevent foodborne illnesses and assure the safety of food preparation in food service settings.
Research goals include:
Create the basic knowledge to permit the food industry to develop safe and flavorful food products
Reduce incidence of pathogens by incorporating natural anit-microbials in ready-to-consume foods
Reduce food spoilage by using naturally occurring chemicals from edible plants.
Optimize product quality by evaluating food component interactions
Increase understanding of the structural characteristics that proteins bring to food products.
Develop a polymer science approach to study lipid replacement in cereal-based systems.
Evaluate the farm to table movement of food and determine where contamination may occur.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	9.2	0.0	5.6	0.0
2008	9.2	0.0	5.6	0.0
2009	9.2	0.0	5.6	0.0
2010	9.2	0.0	5.6	0.0
2011	9.2	0.0	5.6	0.0

Outputs for the Program

13. Activity (What will be done?)

Food Safety for Food Service: Face-to-face and on-line courses will be delivered, resulting in examination and certification of food service workers. Renewals of this certification will be offered and the course will be offered in Spanish. Food Safety Employee and Volunteer training: Face-to-face education in food service settings and community settings will deliver food safety training to those who handle food. The public will have education available about food safety in the home through media campaigns, phone answering services, the web, fact sheets and workshops. A train the trainer format will also be offered, especially to those local community organizations that can reach high risk audiences with food safety information. The Inspection Division Project: A contract for services will provide a 3/4 time educator to develop and coordinate training for inspection and food industry personnel.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • One-on-One Intervention • Demonstrations • Other 1 (Train-the-trainer)	• Public Service Announcement • Newsletters • TV Media Programs • Web sites • Other 1 (answering lines) • Other 2 (CDDVDs)

15. Description of targeted audience

Research supports the food development industry and food processing industry, while the direct audiences of the outreach efforts are food service workers through relationships with the National Restaurant Association, food handlers in community locations, fishermen and farmers, and high-risk audiences through the organizations they trust.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	1595	7400	0	0
2008	1680	7400	0	0
2009	1765	7400	0	0
2010	1850	7400	0	0
2011	1935	7400	0	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

On-line and face-to-face classes will be delivered for food service workers in English. (Target expressed as number of courses offered.)

2007 Target: 58
2008 Target: 65
2009 Target: 73
2010 Target: 81
2011 Target: 89

Output Text

Content for food service professionals will be translated into Spanish and adapted for Latino culture participants. (Target indicates number of courses available in Spanish.)

2007 Target: 3
2008 Target: 3
2009 Target: 3
2010 Target: 3
2011 Target: 3

Output Text

Media distribution of food safety content areas will be disseminated on timely topics. (Target indicates number of new content releases distributed.)

2007 Target: 52
2008 Target: 52
2009 Target: 52
2010 Target: 52
2011 Target: 52

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

At the completion of each teaching session, participants will show increased knowledge of food safety as measured on the Life Skills evaluation. (Target expressed as a percentage of participants.)

Outcome Type: Short

2007 Target: 70
2008 Target: 70
2009 Target: 70
2010 Target: 70
2011 Target: 70

Outcome Text

At the completion of each teaching session, participants will identify behaviors they intend to change and follow up evaluations will determine whether these behaviors change. (Target expressed as number of behaviors changed / participant.)

Outcome Type: Medium

2007 Target: 2
2008 Target: 2
2009 Target: 2
2010 Target: 2
2011 Target: 2

Outcome Text

The MN Dept. of Health reports an 18-20% decrease in inspection critical violations in establishments that employ a Certified Food Manager. Food Safety Education programs will certify food managers. (Target expressed as % of pass rates.)

Outcome Type: Long

2007 Target: 95
2008 Target: 95
2009 Target: 95
2010 Target: 95
2011 Target: 95

20. External factors which may affect outcomes

- Government Regulations
- Populations changes (immigration,new cultural groupings,etc.)

Description

If regulations become lax for foodservice establishments, incentive to engage in certification may decrease. As population demographic change the "where and how" of public food service situations may need adjustment in program planning.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Comparison between locales where the program operates and sites without program intervention
- Other (Inspection documents)

Description

Besides data collection, we plan to study program adaptations for new audiences to determine the cultural appropriateness of our program adaptations. Once program interventions are considered effective because of post-program evaluation, their outcomes will be measured through means similar to data collection for other programs.

22. Data Collection Methods

- Mail
- Tests
- Other (Inspection documents)

Description

The Life Skills evaluation system is used. Questions are selected from the groupings developed by the Extension Service. Analysis of material learned and behaviors changed is measured by pre- and post-class evaluations. For certification programs, a follow-up evaluation is sent to participants to determine the continuing influence of materials presented. Evaluation of facilities by MDH or MDA inspectorss will be collected from inspection scores, which are public domain. Data primarily will be searched for changes in compliance at inspections done after facility personnel have completed training. Improved inspection scores, fewer violations and a decrease particularly in critical violations would be measures of success. Data are also collected from Certified Food Managers renewing their certificaiton through Serve it Up Safely in the classroom setting. The percentage making significant changes to decrease the incidence of foodborne illness outbreaks is tabulated, along with specific practices put in place. These evaluations will determine whether Food Safety Education programs are making a difference.

1. Name of the Planned Program

Commodity Crop Production

2. Program knowledge areas

- 205 Plant Management Systems 20 %
- 211 Insects, Mites, and Other Arthropods Affecting Plants 10 %
- 206 Basic Plant Biology 10 %
- 201 Plant Genome, Genetics, and Genetic Mechanisms 10 %
- 216 Integrated Pest Management Systems 10 %
- 212 Pathogens and Nematodes Affecting Plants 10 %
- 204 Plant Product Quality and Utility (Preharvest) 20 %
- 213 Weeds Affecting Plants 10 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The Commodity Crop Production program focuses on the development and delivery of timely research-based information and sound agronomic production principles. This research accelerates the adoption of production practices that increase profitability and reduce risks that face commodity crop producers in Minnesota. Production capacity and efficiency and crop protection are major factors supporting Minnesota crop productivity. Minnesota producers seek ways to minimize their inputs in the areas of pesticides and fertilizers by adopting new crop technologies, diversifying their crops, minimizing soil erosion with less tillage operations, and taking advantage of new alternative crop markets. New technologies, including plant transformation, genomics, and computer-assisted biology will help provide the necessary tools needed to understand and later modify plants for improved production characteristics.

6. Situation and priorities

The primary commodity crops produced in Minnesota are corn, small grains (spring wheat, barley and oats) and soybean. These crops produce approximately $3 billion in cash receipts to Minnesotafarmers, contributing economically to Minnesota's rural communities and to the state as a whole. Another important commodity crop in Minnesota is sugar beets. Minnesota ranks first nationally in sugarbeet production, raising 460,000 acres annually. The annual economic benefits from the beet sugar industry in Minnesota-North Dakota include $1.1 billion in direct impacts plus another $2 billion in secondary impacts.

7. Assumptions made for the Program

A balanced approach toward commodity, industry and regulatory partners is necessary to maintain programmatic funding and our competitive position. The biggest challenge to the Commodity Crops program is how to efficiently and effectively integrate across county, regional and state levels of programming to best serve the commodity crop producers who farm these 17 million acres of land each growing season.

8. Ultimate goal(s) of this Program

The ultimate goal of this program is to accelerate the adoption of production practices that increase profitability and reduce economic and enviromental risks that face commodity crop producers in Minnesota. Research components seek to:
Identfy and overcome constraints to crop production.
Focus on soil health, tillage systems, crop rotations, pest management and decision support systems that will accelerate the adoption of research results on farms by demonstrating the benefits of research in terms of the whole farm.
Enhance the health and safety of producers and pesticide applicators.
Develop efficient crop production and sustainable cropping systems.
Create discoveries in germplasm development, genetic transformation and the development and application of molecular markets --crop improvement for the introduction of new genes to increase resistance to pests and diseases; and improvement of productivity and crop quality,.
Develop new approaches for breeding and genetic improvement using molecular technologies.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	11.9	0.0	98.2	0.0
2008	11.9	0.0	98.2	0.0
2009	11.9	0.0	98.2	0.0
2010	11.9	0.0	98.2	0.0
2011	11.9	0.0	98.2	0.0

Outputs for the Program

13. Activity (What will be done?)

Crop production programming will:
Offer research based educational opportunites to Ag Professionals
Produce regional events for crop producers on topics such as pest management, fertility, health and safety, and production practices.
Produce publications and support materials, both online and hard copy.
Do applied research on production practices.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • One-on-One Intervention • Demonstrations	• Newsletters • Web sites

15. Description of targeted audience

The primary audience are the producers of corn, soybean, small grains and sugar beets. The secondary audience is the

consultants who have commodity crop producers as their customers.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	36300	20000	0	0
2008	36300	20000	0	0
2009	36300	20000	0	0
2010	36300	20000	0	0
2011	36300	20000	0	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	3
2008	3
2009	3
2010	3
2011	3

18. Output measures

Output Text

Conduct regional and local events to provide producers with latest applied research for improved crop management. (Target expressed as number of events)

2007 Target: 100
2008 Target: 100
2009 Target: 100
2010 Target: 100
2011 Target: 100

Output Text

On-farm research will be conducted and result in findings that will inform producers about best management practices.

2007 Target: 0
2008 Target: 0
2009 Target: 0
2010 Target: 0
2011 Target: 0

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

At the completion of each training event, participants will show increased knowledge of appropriate crop technology production practices (Target expressed as a percentage of participants.)

Outcome Type: Medium

2007 Target: 50

2008 Target: 55

2009 Target: 60

2010 Target: 65

2011 Target: 70

Outcome Text

Improve irrigation water use efficiency by having irrigating farmers use at least two irrigation water monitoring tools to support their irrigation water scheduling decisions. (Target expressed as percentage of farmers adopting tools)

Outcome Type: Short

2007 Target: 75

2008 Target: 0

2009 Target: 0

2010 Target: 0

2011 Target: 0

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Adjustments to both the research and outreach work related to the program will be necessary in response to all of the above listed external factors, some of which are more predictable than others In an increasingly large-scale and global environment. Crop producers are affected by changes in government regulations, the economy and, as always, the weather.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

Evaluation of events will include post program studies and comparison studies. Evaluation of on-farm studies will include comparison and case studies. Input from producers, crop scientists and specialists and the agricutlural input industry will be used each year to enhance and improve the program.

22. Data Collection Methods

- Sampling
- On-Site
- Case Study
- Observation

Description

see above

1. Name of the Planned Program

Community Economics

2. Program knowledge areas

- 608 Community Resource Planning and Development 70 %
- 602 Business Management, Finance, and Taxation 30 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The focus is on empowering communities through research-based information to address the economic challenges facing them. Specific research addresses the relationship of supply and demand for housing in rural communities, understanding family businesses as a vehicle for economic development, and improving the management skills of small business owners relative to business structures, product development and market evaluation.
Community Economics outreach programs deliver education, local assessments and discussions as decision-makers plan for the future of their economy and public finance options. Programs include technology literacy programs, customer service training in communities, business retention and expansion programs, retail analysis and development, public finance education programs, tourism development and certificate in festival and event management. Each of these programs informs local decisions and builds on strengths of local economies.

6. Situation and priorities

Global economic changes require rapid changes in rural economies and diversification of local economic bases. Economic opportunities in both rural and urban areas depend significantly on the health of existing businesses, on the availability of affordable housing, and on the organization, delivery and finance of local government services. To remain healthy and viable, businesses in rural communities increasingly need information about local labor markets and employment trends, and asistance in market evaluation, new product development, and improved small business decision-making.
Many communities strive to build a strong economic future, but rely too much upon "guess work" to inform their ideas. Our priority is to strengthen the information base from which local leaders act, and to encourage them to develop a plan for their community's future. Minnesota communities are challenged to cope with shifts that develop from changing industries, global markets, regionalization of the retail sector, and increased pressure on local governments to provide for their needs. As these shifts occur, local decision-makers need to learn, research, plan and act for the future of the community.

7. Assumptions made for the Program

Actions on the part of the entire community can affect the success of individual businesses in that community. Research-based information can inform community action.

8. Ultimate goal(s) of this Program

The goal of our community economics programs is improved local decisions based on high quality information and effective research and Extension education on topics of business and industry climate, tourism and public finance issues.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	8.1	0.0	6.5	0.0
2008	8.1	0.0	6.5	0.0
2009	8.1	0.0	6.5	0.0
2010	8.1	0.0	6.5	0.0
2011	8.1	0.0	6.5	0.0

Outputs for the Program

13. Activity (What will be done?)

Work in communities is achieved through the efforts of Extension Educators, researchers at the Department of Applied Economics, the Department of Housing, Design and Apparel, and the staff of the University of Minnesota Tourism Center. Extension educators deliver workshops in communities, conduct and deliver applied research at the community level, connect communities to university researchers and deliver skills trainings in the areas of customer service and internet education. Research is transferred to Extension educators and is disseminated through a variety of web, publication and community-based education vehicles.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • Other 1 (Research and Summary Reports)	• Web sites • Other 1 (newspaper articles) • Other 2 (on-line courses)

15. Description of targeted audience

Primary audiences for community economics programs include chambers of commerce, the tourism industry, economic development officers, local governments, and nonprofits that can, in turn, support local economic development efforts.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	9000	8000	0	0
2008	9500	8000	0	0
2009	9750	8000	0	0
2010	10000	8000	0	0
2011	10250	8000	0	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Educational workshops will be provided (face-to-face and on-line). (Target expressed as numbers of workshops.)

2007 Target: 180
2008 Target: 220
2009 Target: 230
2010 Target: 240
2011 Target: 250

Output Text

Community-based research will be conducted regarding retail trade, business retention and expansion and tourism development. (Target expressed as numbers of communities engaged.)

2007 Target: 10
2008 Target: 12
2009 Target: 14
2010 Target: 16
2011 Target: 18

Output Text

Community-based trainers will be trained to continue providing education in communities through business retention and expansion programming, customer service training and internet literacy programs. (Target expressed as the numbers of trainers trained.)

2007 Target: 80
2008 Target: 84
2009 Target: 88
2010 Target: 92
2011 Target: 96

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text
Participants will increase their knowledge related to topics having to do with community economics. (Target expresses the percentage of participants reporting increased knowledge.)

Outcome Type: Short

2007 Target: 80
2008 Target: 80
2009 Target: 80
2010 Target: 80
2011 Target: 80

Outcome Text
Communities will use education provided to develop plans for future economic development. (Target expressed as numbers of communities articulating plans.)

Outcome Type: Medium

2007 Target: 8
2008 Target: 15
2009 Target: 20
2010 Target: 25
2011 Target: 30

Outcome Text
Communities will report that plans developed as a result of community economics programming were implemented to the betterment of their local economies. (Target expressed as number of communities reporting implemented plans.)

Outcome Type: Long

2007 Target: 5
2008 Target: 10
2009 Target: 13
2010 Target: 18
2011 Target: 20

20. External factors which may affect outcomes

- Economy
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Economies shift with a myriad of external forces, including economic shifts which can challenge or support local businesses, government regulations that affect tax bases or support one industry over another, and population changes that can drain communities of their population base or create influxes. All of these changes require communities to act on new information, and so challenges research and Extension to respond.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- Case Study

Description

Post-program evaluations will determine whether knowledge was gained. Phone and one-on-one "check-ins" will gather information about community planning efforts. Longitudinal follow up will assess the success of local planning.

22. Data Collection Methods

- Telephone
- On-Site
- Structured
- Unstructured

Description

Data will be collected through post-program written surveys and one-on-one interviews with community leaders who are in touch with community actions and outcomes.

1. Name of the Planned Program

Nutrition Education Program

2. Program knowledge areas

- 701 Nutrient Composition of Food 40 %
- 703 Nutrition Education and Behavior 60 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The Extension Nutrition Education Program (NEP) provides nutrition education to audiences of low-income persons and professionals who serve low-income persons. Extension's NEP program includes the Food Stamp NEP (FSNE), the Expanded Food and Nutrition Education Program (EFNEP), and a University funded program. The FSNE and EFNEP programs focus on diet quality, food safety, food resources management and food security. These have been designed to reach specific target populations ranging from children in Head Start to elders. Through the University of Minnesota Extension Service the FSNE and EFNEP programs directly reaches individuals in 85 of Minnesota's 87 counties. Educational programs are designed and delivered to youth, adults and seniors. Programs developed for adults and seniors focus on changing learned behaviors related to food purchase and consumption. Youth programs are based on the premise that learning healthful eating habits during childhood will play a role in the prevention of nutrition-related disease, the program not only works to change individuals' knowledge and/or behaviors, but the programs are designed to support systemic change. The University supports a related program for school food service workers and managers to improve the healthfulness of food service programs in Minnesota public schools. All three aspects of Minnesota's NEP are based on research on the impact of the education provided to children and the impact of the education provided to children and the impact of access to food on the healthful eating of families.
The Agricultural Experiment Station research focuses on issues of food consumption for optimal health, food chemcials in processing and storage, and product characteristics of foods grown in the midwest. Dietary research focuses on the relationship between vivolipid oxidation and its protection against heart disease, diabetes and cancer, on measuring the physiological effects of dietary fiber, investigating foods that help in the treatment for diabetes, the potential of phyto-estrogens as cancer preventatives, developing new sources of dietary antioxidants and fibers, understanding the link between fat, salt and hypertension, and on a variety of dietary influences of colon cancer.

6. Situation and priorities

Nutrition and optimal food intake is a fundamental physical building block and important to the well being of Minnesotans. Research has established the link between adequate nutrition in the early years and adult productivity, between adequate nutrition and risks of disease and disability, and between adequate nutrition education and nutritional intake.
In the U.S., $92.6 billion annual costs are related directly to obesity-related health concerns. One-half of these costs are covered directly by tax dollars via Medicare and Medicaid. More than half of all Minnesotans are considered to be obese or overweight (61%), putting them at risk for heart disease, stroke, certain cancers adn type two diabetes, all of which are among the leading causes of death. For Minnesota, the cost of obesity is $1.3 million dollars with $227 million of this going into Medicaid population care. A comprehensive approach addresses not only individual behavior change, but environmental and systemic change as well. According to the Centers for Disease Control, during the past twenty years, obesity among adults and children has risen significantly, resulting in a host of poor health conditions. In 2004, in excess of 260,000 Minnesotans are certified as eligible for Food Stamps. Assuming 61% have weight problems, over 150,000 Food Stamp participants need nutrition education for this alone.

7. Assumptions made for the Program

Healthful eating habits in childhood play a role in the prevention of chronic under-nutrition and acute nutrition problems throughout their lives. The development of healthful eating habits as a child can serve as a basis for adult dietary behaviors. Consumers will increase their healthful behaviors through adequate information, tools and motivation. Individuals benefit from an environment that reinforces changes to more healthful food selections adn more nutritious food choices. In Minnesota, 16

percent of the population is estimated to lack adequate food each day.

8. Ultimate goal(s) of this Program

Through a comprehensive approach to change individual level decisions and environmental change, Minnesotans will make decisions that will enhance their health and well-being.
Research goals to support these decisions include:
Determining optimal food consumption for health of colon, reducing cardiovascular disease, cancer and diabetes
Determining the physiological effects of various dietary fibers
Analyzing the loss of food chemicals in processing and storage.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	17.5	0.0	23.4	0.0
2008	17.5	0.0	23.4	0.0
2009	17.5	0.0	23.4	0.0
2010	17.5	0.0	23.4	0.0
2011	17.5	0.0	23.4	0.0

Outputs for the Program

13. Activity (What will be done?)

Efforts will include:
Educational programs with individuals in group or one-to-one settings regarding diet quality, food safety, food resource management and food security;
Development and implementation of a series of trainings for school food service personnel throughout Minnesota;
Research on the impact of nutrition education on children and the impact of access of food on families.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Education Class • Workshop • Other 1 (training of partners) • Other 2 (satellite training)	• Public Service Announcement • Newsletters • TV Media Programs • Web sites

15. Description of targeted audience

Children, parents and other adults from low-income families.
Professionals who work with low-income families.
Consumers lacking adequate information, tools or motivation to make informed health behavioral choices regarding healthy eating and improving physical activity levels.
School food service workers and managers seeking assistance in implementing federal regulations and improving healthful food choices of children.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	70000	1400000	126000	67000
2008	72800	1428000	131000	68300
2009	75700	1456600	136200	69700
2010	78700	1485691	141700	71100
2011	81900	1515400	147400	72500

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Classes will be provided in individual and group settings that teach about quality, food safety, food resource management and food security. (Target expressed as number of counties reached.)

2007 Target: 85
2008 Target: 86
2009 Target: 87
2010 Target: 87
2011 Target: 87

Output Text

School Food Service Institutes will be held for school food service workers and managers so that they implement healthy food service programs for Minnesota's public schools. (Target expressed as number of institutes held each year.)

2007 Target: 4
2008 Target: 8
2009 Target: 12
2010 Target: 12
2011 Target: 12

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

An increased number of individuals will use research-based information from Extension to improve their intake of healthful foods. (Target expressed as percentage of participants who complete six or more lessons and self-report change.)

Outcome Type: Medium

2007 Target: 50
2008 Target: 50
2009 Target: 50
2010 Target: 50
2011 Target: 50

Outcome Text

Food service personnel will use research-based information from Extension to improve students' healthy eating. (Target expressed as percentage of workshop participants reporting use of materials.)

Outcome Type: Medium

2007 Target: 50
2008 Target: 60
2009 Target: 70
2010 Target: 80
2011 Target: 80

20. External factors which may affect outcomes

- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Changes in the economic status of families and institutions, such as schools, can positively or negatively affect how much an individual or institution can invest in behavior change. Greater or lesser emphasis on health and nutrition can enhance or decrease the effectiveness of our approach. Changes in population can affect who is targeted by the program and whether cultural adaptations may be needed.

21. Evaluation studies planned

- Retrospective (post program)
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants

Description

Minnesota plans to invest in a new evaluation specialist to help conduct both normative and summative evaluations for the Nutrition Education Program.

22. Data Collection Methods

- Telephone
- On-Site
- Unstructured

Description

{NO DATA ENTERED}

1. Name of the Planned Program

Consumer Horticulture

2. Program knowledge areas

- 213 Weeds Affecting Plants 10 %
- 205 Plant Management Systems 60 %
- 102 Soil, Plant, Water, Nutrient Relationships 10 %
- 132 Weather and Climate 10 %
- 211 Insects, Mites, and Other Arthropods Affecting Plants 10 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

Information flows from the University to horticulture consumers through several pathways. Research-based written materials and audio-visual materials are available to consumers through Extension and horticulture department web sites and the Extension distribution center. University faculty work with and provide education for green industry personnel who interact directly with consumers. The primary method -- face-to-face and direct response to consumer questions about home horticulture and environmen -- is delivered through University-trained Master Gardener volunteers. The University is seen as a premier source for homeowner horticulture and environmental information, with a strong community-based presence as well as presence in the mass media. Faculty research is closely tied to this effort.

6. Situation and priorities

The National Gardening Survey suggests that more than half of the citizens of the state of Minnesota are involved in some form of activity that is defined as horticultural. This means that some 2.5 million people are performing gardening and landscaping activities and are potential consumers of university-based horticulture information. Technological advances have increased both the number of sources of as well as the pathways to horticultural information. Consumers have many choices as to where and how they get their horticultural information. Therefore, multiple mediums for delivery of this information is the best way to reach the audiences we seek and who seek this research-based information. We focus our educational efforts in consumer horticulture in four areas:
answering consumer questions;
educating consumers on best practices in horticulture and plant health care;
addressing issues and practices specific to homeowners' impact on environmental issues of water quality; and,
using horticulture education activities to increase the engagement of youth and new audiences in Extension programs.

7. Assumptions made for the Program

Most consumers of horticulture information work from the paradigm of needing timely answers to questions. Other consumers want to build their basic knowledge in horticulture, and are willing to become expert disseminators of that information in their communities. Still others need to know critical information about horticulture and environmental practices that impact their lives and their communities.

8. Ultimate goal(s) of this Program

Our efficient, effective and customer-responsive delivery of research-based information will lead to adoption of sound home horticulture and environmental practices that enhance the quality of life for individuals and add value for the public good.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	2.1	0.0	8.4	0.0
2008	2.1	0.0	8.4	0.0
2009	2.1	0.0	8.4	0.0
2010	2.1	0.0	8.4	0.0
2011	2.1	0.0	8.4	0.0

Outputs for the Program

13. Activity (What will be done?)

Consumer horticulture programs will be delivered in two ways. First, products and services will deliver time-sensitive, responsive information to consumers who want answers to questions. This includes the development and dissemination of written materials, audio-visual materials, web sites, and telephone answer desks. Second, products and services will build horticultural knowledge in communities through University-trained Master Gardeners. They will deliver this information through a variety of venues based on local needs and situations. The Master Gardener groups will collaborate and partner with other community and University groups (e.g., Research and Outreach Centers, Soil Conservation Districts, Community Garden Associations, etc.) in developing and delivering programs.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • One-on-One Intervention • Demonstrations • Other 1 (Training of trainers)	• Public Service Announcement • Newsletters • TV Media Programs • Web sites

15. Description of targeted audience

From the large group of horticultural information consumers, two distinct audiences have been selected be reached with

specially designed programs. Audience #1 is people who need horticultural information where time is a factor. This portion of our audience seeks answers to questions and want a timely response. For this audience, we will provide problem-specific information with as little "friction" as possible. Audience #2 is people who want to build, or whom we seek to build, basic knowledge in horticulture and environmental stewardship. For these audiences, there are opportunities for in-depth classes and/or longer-term educational experiences.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	66000	51000	5000	0
2008	66000	51000	5000	0
2009	66000	51000	5000	0
2010	66000	51000	5000	0
2011	66000	51000	5000	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Master Gardeners trained by Extension will deliver hours of educational service to the residents of Minnesota. (Target expressed as the number of volunteer hours committed by Master Gardeners.)

2007 Target: 65000
2008 Target: 65000
2009 Target: 65000
2010 Target: 65000
2011 Target: 65000

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Minnesotans interested in horticulture will deepen their knowledge of horticulture content. (Target expressed as a percentage of persons reporting new knowledge.)

Outcome Type: Short

2007 Target: 75

2008 Target: 75

2009 Target: 75

2010 Target: 75

2011 Target: 75

Outcome Text

Minnesotans with answers to horticulture questions will act on university-based research. (Target expressed as percentage of users who report using the information.)

Outcome Type: Medium

2007 Target: 50

2008 Target: 50

2009 Target: 50

2010 Target: 50

2011 Target: 50

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)

Description

The content of Consumer Horticultural programs is responsive to the current state of weather and climate. The program changes as these factors change. Population changes affect the type of outreach we do, focused on seeking audiences who reflect the diversity of our population.

21. Evaluation studies planned

- Retrospective (post program)
- Case Study

Description

{NO DATA ENTERED}

22. Data Collection Methods

- Sampling
- Mail
- Case Study

Description

{NO DATA ENTERED}

1. Name of the Planned Program

Commercial Horticulture

2. Program knowledge areas

- 204 Plant Product Quality and Utility (Preharvest) 40 %
- 205 Plant Management Systems 40 %
- 211 Insects, Mites, and Other Arthropods Affecting Plants 10 %
- 201 Plant Genome, Genetics, and Genetic Mechanisms 10 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

This program supports the major components of this industry: commercial fruit and vegetable growers, landscape services, nursery/greenhouse production and distribution, and florists. Within the nursery sector, there are also three basic activities: production of plant materials, wholesale distribution and retail distribution of nursery products. Research to develop new varieties and to support the commercial horticulture industry ranges from basic to applied. The Extension/outreach component of this planned program engages and serves a diverse audience of growers who raise and sell fruits and vegetables for profit. Production systems include the employment of organic, conventional and integrated crop management strategies. Extension programs in nursery and plant health deliver information regarding plant health and growth to members of the green industry and related industries. Another program in this area connects the nationally recognized and leading apiculture research at the University with commercial and hobby beekeepers.

6. Situation and priorities

Commercial horticulture and the green industry are some of the fastest growing segments of Minesota's agricultural economy. Commercial growers and turf and nursery professionals continue to seek new research information and educational oportunities to refine their production practices, to increase profitability, reduce inputs, and protect natural resources.

7. Assumptions made for the Program

Minnesota's unique, and difficult climate for fruit and vegetable growers and ornamental nurseries make it essential that we undertake research specific to our geographic conditions. Though challenging, there is also enormous potential in this endeavor, and growers in Minnesota rely on the University of Minnesota's research and extension services. Regarding Extension programming, exploring new audiences is important to the sustainability of this work. Continued growth in the numbers of small-scale commercial growers is anticipated in the next three years. This group is usually not trained in agricultural disciplines, but often has experience in business, framing the needs and expectations of this clientele group. Most green industry producers are self reliant and use experience rather than science to care for their crops.

8. Ultimate goal(s) of this Program

Extension goals:
To enhance the profitability of fruit and vegetable production, maintain food security, increase the potential of locally-grown food sources, and add value while maintaining the sustainability of the vegetable and fruit crop industry in Minnesota.
Research goals:
To develop nursery products that enhance the ethical and economic progress of the industry.
To improve nursery products and techniques.
To develop new technologies and strategies that increase proftitability while minimizing the environmental impact from urban agriculture.
To develop new turfgrass varieties and management practices for turfgrass.
To research cultivars/rootstocks and cultural systems that improve production efficiency and promote sustainability
To research post harvest handling practices that improve crop use and product safety.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	8.1	0.0	36.5	0.0
2008	8.1	0.0	36.5	0.0
2009	8.1	0.0	36.5	0.0
2010	8.1	0.0	36.5	0.0
2011	8.1	0.0	36.5	0.0

Outputs for the Program

13. Activity (What will be done?)

Organize, coordinate and participate in events that assist us in reaching the commercial horticulture industry, including (but not limited to) The Potato Growers Association conference, Beginning Grower workshops, Famers Markets workshops, turfgrass professsional workshops, High tunnel workshops, International Crop Expo, Midwest Apple Growers Association conference and field day, MN Fruit and Vegetable Growers Association conference and field day, North Country Small Fruit and Vegetable Schools, and Research and Outreach Center Horticulture Days. Produce online information and websites.Also, work through the Minnesota Landscape Association to to produce shows on nursery and plant health and pesticide recertification.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • Demonstrations	• Newsletters • Web sites • Other 1 (radio programs) • Other 2 (local newspapers)

15. Description of targeted audience

The audiences include fresh market producers including new immigrant farmers, growers of fruits and vegetables for processing, the processing industry, associated agribusinesses turf professionals, nurseries and garden centers, and landscape

professionals.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	5000	18500	0	0
2008	5300	18500	0	0
2009	5500	18500	0	0
2010	5700	18500	0	0
2011	6000	18500	0	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	3
2008	3
2009	3
2010	3
2011	3

18. Output measures

Output Text

Deliver workshops, classes and seminars and other events to provide information to targeted audiences.

2007 Target: 70
2008 Target: 80
2009 Target: 90
2010 Target: 100
2011 Target: 100

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Participants will gain knowledge in fruit and vegetable growing practices. (Target expressed as percentage of participants.)

Outcome Type: Short

2007 Target: 60

2008 Target: 65

2009 Target: 70

2010 Target: 75

2011 Target: 80

Outcome Text

Participants will report increased skills in plant care. (Target expressed as percentage of participants.)

Outcome Type: Medium

2007 Target: 50

2008 Target: 55

2009 Target: 60

2010 Target: 65

2011 Target: 70

Outcome Text

Turf managers will have increased knowledge of phosphorous and fertilizer application (Target expressed as percentage of participants.

Outcome Type: Medium

2007 Target: 50

2008 Target: 55

2009 Target: 60

2010 Target: 65

2011 Target: 70

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

This program is sensitive to the changing demographics of Minnesota, which is bringing new immigrants into the workforce. It is also sensitive to competition from other growing areas with transportation advantages, to changing expectations and demands of consumers, and the increasing interest especially of urban consumers in local and organic produce, which both increases demand for products and increases expectations and demand for quality products.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

Partition survey data by commodity, percent of income due to vegetable and fruit farming, years of experience, etc, to gain a better understanding of needs of each commodity group.

22. Data Collection Methods

- Sampling
- On-Site
- Case Study
- Observation

Description

{NO DATA ENTERED}

1. Name of the Planned Program

Livestock

2. Program knowledge areas

- 302 Nutrient Utilization in Animals 15 %
- 311 Animal Diseases 20 %
- 304 Animal Genome 5 %
- 305 Animal Physiological Processes 10 %
- 306 Environmental Stress in Animals 5 %
- 315 Animal Welfare/Well-Being and Protection 5 %
- 307 Animal Management Systems 30 %
- 301 Reproductive Performance of Animals 10 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

This program includes a wide range of programming related to beef, swine, poultry, dairy cow and horse. It also includes work on animal facilities, pasture and manure management.
Animal production strategies, research development and niche markets are rapidly changing. In response, research and extension programming related to this planned program is flexible, applicable and adapts to audiences needs. The livestock industry is in the midst of major structural changes. Issues such as animal identification, disease surveillance, biosecruity, profitability, food safety and quality and the impacts of international markets are identified throughout all facets of the industry. This program is focusing on inclusion of new partnerships in educational delivery, regionalization and multi-state efforts to provide new resources and opportunites.

6. Situation and priorities

Minnesota livestock producers are challenged with integrating knowledge from diverse disciplines into production practices suitable for their individual operation. Research and education on animal production systems must address the interactions between nutrition, genetics, reproduction, physiology, microbiology, immunology, and molecular biology, and also related effects on animal health, productivity, and impacts to the environment. In Minnesota, large amounts of land (including 2,000,000 acres of conservation reserve land) are suited for beef cow/calf operations, but the cost of production is high due to feed costs and inefficient use of available forage. Research is needed to develop grazing and forage systems to reduce feed costs and improve profitability. Minnesota is the nation's sixth largest milk-producing state and has the largest turkey industry in the nation.

7. Assumptions made for the Program

The major livestock categories--poultry, swine, beef, and dairy cows--share some challenges. All face the challenge of minimizing their production costs while supplying high quality product to various consumer markets. Consumers are indicating a preference for high protein meat, lower fat products, convenience, product variety and high quality taste. Livestock producers must respond to these demands. One recent survey indicated producers prefer easily accessible information, such as short publications and internet/web based offerings. Local programs were preferred over travel to other locations. Disease/health remains a high priority topic.

8. Ultimate goal(s) of this Program

The ultimate goal is to assure a thriving livestock industry. To accomplish this:
Research goals are:
To improve production efficiency.
To increase research on lean growth and alternative animal products for consumer driven markets.
To evaluate alternative feeds and feeding and management strategies to improve economic efficiency.
To determine nutrient requirements to enhance economic and environmentally sustainable animal products. To improve definition of dietary nutrient needs for food animals.

To identify major animal genes that affect growth and development, reproductive performance, lactation, and disease resistance characteristics.
To identify biotechnology that would assist producers in their efforts to accelerate the genetic improvement of animals.
Extension goals are:
To reduce economic loss related to animal disease, environmental factors, and stress
To educate consumers and youth regarding animal production and products
To develop animal feeding strategies considering nutrient use and alternative ingredients
To increase understanding of animal management and disease.
To complete applied research to support extension efforts in animal nutrition, production, health, processing and food safety.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	10.2	0.0	44.9	0.0
2008	10.2	0.0	44.9	0.0
2009	10.2	0.0	44.9	0.0
2010	10.2	0.0	44.9	0.0
2011	10.2	0.0	44.9	0.0

Outputs for the Program

13. Activity (What will be done?)

Provide direct education via regional and local programs.
Offer train the trainer opportunities.
Use media, websites, on-line educational delivery systems, listserves, audio-conferencing and other technologies to offer extention education to a diverse audience.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Workshop • Group Discussion • One-on-One Intervention • Demonstrations • Other 1 (train the trainer) • Other 2 (listservs, Breeze Live-web)	• Newsletters • Web sites • Other 1 (MN Farm Information Line)

15. Description of targeted audience

Minnesota dairy producers, pork producers, poultry producers, beef producers, veterinarians, consumers, Minnesota feed industry. Forage growers and feeders, and commercial hay producers.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	14600	3800	0	0
2008	14600	3800	0	0
2009	14600	3800	0	0
2010	14600	3800	0	0
2011	14600	3800	0	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	2
2008	2
2009	2
2010	2
2011	2

18. Output measures

Output Text

Through demonstration projects, provide ideas and solutions to producers on such topics as milk house waste, manure rate application on fields, and on-farm demonstrations of forage topics such as alfalfa brown root rot variety screening, and alfalfa fall cutting. (Target expressed as number of demonstration projects.)

2007 Target: 20
2008 Target: 20
2009 Target: 20
2010 Target: 20
2011 Target: 20

Output Text

Provide workshops, training sessions, schools, and other processor specific events. (Target expressed as number of events.)

2007 Target: 80
2008 Target: 80
2009 Target: 80
2010 Target: 80
2011 Target: 80

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Participants in Beef Home Study Course will report increase in knowledge in pasture management, nutrition, and stocker feeder management. (Target expressed as percentage of participants.)

Outcome Type: Short

2007 Target: 60
2008 Target: 65
2009 Target: 70
2010 Target: 75
2011 Target: 80

Outcome Text

Beef producers make management adjustments based on results of evaluation of their calves. (Target expressed as percentage of producers reporting making changes,)

Outcome Type: Medium

2007 Target: 50
2008 Target: 55
2009 Target: 60
2010 Target: 65
2011 Target: 70

Outcome Text

Through the Quality Count$ program, the average bulk tank somatic cell count in Minnesota dairy operations will be reduced to below 300,000.

Outcome Type: Long

2007 Target: 0
2008 Target: 0
2009 Target: 0
2010 Target: 0
2011 Target: 0

Outcome Text

After attending manure management workshops participants will be able to complete a manure management plan that meets Minnesota Pollution Control Agency requirements. (Target expressed as percentage of participants.)

Outcome Type: Medium

2007 Target: 75

2008 Target: 80

2009 Target: 85

2010 Target: 90

2011 Target: 90

Outcome Text

After completion of the on-farm assessment program which evaluates animal welfare for individual swine production sites, producers make changes in facility/equipment or management practices to improve swine welfare. (Target expressed as percentage of participants making changes.)

Outcome Type: Medium

2007 Target: 50

2008 Target: 55

2009 Target: 60

2010 Target: 65

2011 Target: 70

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)
- Other (Changing consumer preferences)

Description

Pressures on this industry include shifts in consumer quality demands, biosecurity threats, increasing regulations on producers related to environmental concerns, urban and suburban development creating land use issues, energy expenses and global economics.

21. Evaluation studies planned

- After Only (post program)
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Description

Many evaluation components of this planned program include immediate evaluations to get feedback on events. For example, workshops are evaluated through end of session questionnaires but have also included follow up questionnaires mailed out at some interval after the workshop. Some specific areas have data bases that give evaluative information. For example the Dairy Herd Improvement Association provides somatic cell count summary reports of association member dairy herds. From that monthly data can be determine whether there are changes occurring in the industry. Similar cumulative data is available for milk plants.

22. Data Collection Methods

- Sampling
- Whole population
- Mail
- On-Site
- Case Study
- Observation
- Tests

Description
see above