

**North Central Region SARE Professional Development Program
Michigan Sustainable Agriculture Plan of Work
Calendar Year 2010
by Dale R. Mutch**

Section 1: Background

The Michigan SARE State Sustainable Agriculture PDP program is coordinated through the Michigan State University (MSU) Extension KBS Land and Water Unit under the direction of Dr. Dale R. Mutch and Dr. Dean G. Baas. An active organization has been established promoting programs and fostering professional development for Michigan agricultural educators in sustainable agriculture. In 2009 through the input of the advisory council, our PDP program was redirected to focus on four new initiatives relevant to the current sustainable agricultural needs in Michigan (Table 1). In addition to committing \$5,000 in SARE PDP funds to each initiative, a goal of matching these with an additional \$5,000 from other sources was set. An additional sustainable agriculture support initiative was retained to fund worthy PDP development not covered by the four initiatives. Approximately \$24,000 was committed in total for these initiatives. The level of PDP funding and matching funds varied between initiatives (Table 1). Over \$21,000 in PDP initiative funding was committed in 2009. The total matching funds exceeded the PDP funding by approximately \$3,500.

Table 1: 2009 initiatives, SARE PDP funds and matching funds.

Initiative	SARE PDP Funds (\$)	Matching Funds (\$)	Total (\$)
Local food supply chain	5,050	1,600	6,650
Sustainable animal production	5,000	10,270	15,270
Transitioning of farms to organic and/or sustainable production	4,500	2,800	7,300
Cover crops	2,150	1,000	3,150
Additional sustainable agriculture support	4,500	9,000	13,500
Total	21,200	24,670	45,870

Ten mini-grants and 14 travel scholarships reached 92 educators including extension, university, state/federal/tribal and NGO educators. Michigan PDP and NCR-SARE information was shared with more than 330 individuals at conferences, field days and meetings throughout Michigan. Of the 17 farmer/rancher grant proposals submitted from Michigan, four received funding. Fourteen R & E pre-proposals were submitted and two were invited for full proposal. Two PDP pre-proposals were invited for full proposal and one was funded. Eighteen Youth Educator and seven Youth proposals were submitted with two and five funded, respectively. The response to SARE grant programs and the exposure provided by the Michigan PDP program are evidence of expanding commitment to sustainable agriculture in Michigan. These efforts are producing a viable network of agricultural professionals knowledgeable in sustainable agriculture working to make Michigan even more successful in adopting sustainable agriculture's practices and principles for the future.

Approach for 2010: With the input of the advisory council, the 2010 PDP program will:

- 1) Continue support to the 2009 sustainable animal production initiative
- 2) Redirect the local food supply chain initiative funds to the NCR-SARE regional training initiative: Scaling-Up Local Food Systems
- 3) Redirect the transition of farms to organic and sustainable production initiative funds to a three state (MI, IN and IL) initiative: Sustainable Organic Agriculture – New Ag Network (NAN)
- 4) Establish a new initiative for professional development of youth educators in sustainable agriculture
- 5) Combine the cover crop initiative funds under the other sustainable agricultural support initiative

Section 2: Stakeholder Involvement

An advisory group has been established since 2007 and the members are listed in Attachment 1. The purpose of this advisory group is to advise the coordinator, participate in identifying educational program and research needs, and assist in the selection of recipients for SARE mini-grants and travel scholarships. The advisory group meets twice a year and participates in bimonthly teleconferences. The advisory group has become the voice for SARE in Michigan, informing educators, etc. about SARE PDP.

Section 3: Face of SARE

The Michigan SARE web site (www.misare.msu.edu) contains information about the Michigan PDP program, application forms for mini-grants and travel scholarships and links to other SARE grant programs on the NCR-SARE site. The Michigan SARE web page has been linked with the MSU cover crops web page (www.covercrops.msu.edu) and the New Agriculture Network web page (www.new-ag.msu.edu). In 2009 we had anticipated making information available for all of the previously funded R & E, Professional Development, Farmer/Rancher and Graduate Student Grants; PDP mini-grants and PDP travel scholarships in Michigan and videos of selected projects. The grant information has been compiled and the videos recorded. Publishing these on the website along with a website redesign and update will occur in 2010.

In addition to promoting SARE at a variety of events, field days and meetings, in 2009, SARE was promoted at three small farm conferences: the Michigan Family Farms Conference, Lakeview, MI; the Small Farms Conference, Grayling, MI and the Agriculture for Tomorrow Conference, Escanaba, MI. These three conferences provided coverage for the southern Lower Peninsula, Northern Lower Peninsula and the Upper Peninsula, respectively.

For 2010, Joan Benjamin will be holding two Farmer's Forums at the 2010 Michigan Family Farms Conference highlighting Farmer Rancher Grant projects. For the 2010 Small Farms Conference, we have organized a panel discussion including recipients of grants from a number of SARE sources. We will continue to promote SARE at events, field days and meetings where sustainable agriculture audiences can be reached.

Section 4: Professional Development Initiatives

Existing initiatives continued in 2010

E1. Sustainable animal production

Audience: Extension Educators and Specialists, NRCS, MDA, Conservation Districts

Initiative: Agriculture is the second largest industry in Michigan (\$60 billion) and total livestock and livestock products represent around 40% of total agriculture cash receipts. The livestock sector is equally diverse in species raised and farm size. As land and livestock inputs and energy costs escalate, small- and medium-sized producers can look toward developing sustainable systems that maximize a complementary mix of crops and livestock and at the same time meet social and environmental demands of consumers. The goal is to encourage a more comprehensive approach to integrating crop and livestock systems on Michigan farms. In 2009, eight educators attended professional development with SARE PDP support through a program entitled *Animal Agriculture in the Environment: Learning from across the Pond*. These educators learned from colleagues in Europe how they addressed community and regulatory issues with sustainable livestock production. This initiative will provide funds to develop programs/workshops to transfer knowledge from that program to local educators.

Justification: Livestock producers face several pressures in Michigan—not least of all increasing energy and input costs, environmental concerns and community and regulatory issues at the rural-urban interface. Consumers are increasingly concerned about food safety and demanding verification of source and management methods and questioning the impact of livestock on the environment. European producers have faced these issues longer than US producers. They have advanced sustainable livestock methods to address them.

Activities: Support development of and attendance at workshops and training for agricultural educators expanding their knowledge to include European sustainable animal production. Participants in the *Animal Agriculture in the Environment: Learning from across the Pond* program will host, present and promote these workshops. Some topics include livestock and the environment; coexisting at the urban-rural interface; and composting and pelletizing of wastes.

PDP Budget: Mini-grants: \$3,000; Travel Scholarships: \$1,500

Outcomes/Evaluation: See Program Logic Models, Table 1

E2. Other sustainable agriculture support

Audience: Extension Educators and Specialists, NRCS, NGOs, MDA, Cons. Districts

Initiative: Mini-grants and travel scholarships can help educators, NRCS, governmental and non-governmental organizations develop and deliver professional development programs or demonstrations that promote sustainability of rural and urban communities. To receive these funds, applicants must submit a professional development proposal that addresses the sustainability of agriculture or their communities. These funds need to be used for their professional development and incorporated into their programs and educational activities.

Justification: The advisory group has recommended focusing a majority of Michigan NCR-SARE PDP resources toward the four major initiatives. However, educator support for other sustainable agriculture programs outside of those initiatives must be

available and considered. This initiative addresses support for those deserving proposals.

Activities: Promote mini-grants and travel scholarships for educator programs in sustainable agriculture.

PDP Budget: Mini-grants: \$2000; Travel Scholarships: \$2000

Outcomes/Evaluation: See Program Logic Models, Table 2

New initiatives in 2010

N1. Scaling-up local food systems – regional training program

Audience: Extension Educators, Extension Specialists, NGOs, MDA

Initiative: The NCR SARE PDP Coordinators are collaborating with the University of Wisconsin to pool state Plan of Work funds to support a regional training on an emerging topic of interest across the region. The topic selected was Scaling-Up Local Food Systems. Each state has agreed to send a team of educators engaged in local foods work. Michigan will send a team of up to six educators (including the State Coordinator) to the September 2010 workshop. We will share Michigan local food information and resources and will apply information from the training to develop a Michigan project on scaling-up local food systems in 2011 (and will request NCR SARE PDP funds in the 2011 Plan of Work).

Activities: See University of Wisconsin Plan of Work

PDP Budget: Travel Scholarships: \$4,000; In addition, \$4,000 has been moved from the MI POW budget to the WI POW budget to support this initiative

Outcomes/Evaluation: See University of Wisconsin Plan of Work

N2. Sustainable organic agriculture – New Agriculture Network (NAN) Webinars

Audience: Extension Educators, Extension Specialists and NGOs, State Department of Agriculture, Conservation District personnel

Initiative: Since 2004, three universities --Michigan State University (MSU), Purdue University (PU), and the University of Illinois (UI) -- have collaborated and joined resources to bring seasonal advice to field crop and vegetable educators and growers interested in organic agriculture through the NAN (www.new-ag.msu.edu). On December 15 – 16, 2009, a tri-state workshop was held entitled Intensive Organic Farm Training for Extension Educators funded in part by an NCR-SARE PDP grant. Participating educators identified additional organic farm training and information resources as needs for professional development in organic sustainable practices. This initiative will fund a key educator and a tri-state review team of educators to develop and implement curricula and information resources for a series of five webinars based on organic topic areas. The over 200 articles in the NAN will be leverage to supplement the webinar curriculum. Webinars provide an efficient method to reach educators across the large geographical area. These webinars will be hosted and promoted through eOrganic.

Justification: The organic trade association has indicated that the demand has been growing by more than 20% per year in the past decade. This opportunity is important to many farmers, especially small and mid-sized family-owned farms to ensure financial viability and stability. The agriculture industry benefits by supplying the demand in this fastest growing area of food and feed production. It provides an alternative for all sizes

of farm operations. The demand for organic products appears to be outpacing the capacity of current organic-certified farms to supply. If the current increase in demand continues, the opportunity will be even greater for families to transition to organic successfully. Along with this increase in product demand is an increase in requests for scientifically-based organic information. The NAN is an established network of organic professionals and information resources positioned to supply professional development to Extension educators in sustainable organic agriculture.

Activities: MSU, PU and UI will each contribute \$5,000 towards this multi-state PDP initiative. MSUE will lead and coordinate this program. A key Extension educator will be identified to lead a tri-state Extension review team to develop curricula on organic topics for webinars and associated information resources. Five webinars/topics will be developed and implemented. Potential topics include, but are not limited to weed, insect and disease management; soil quality/cover crops; market development; and certification. This project team will participate in implementing and promoting the webinar series within the individual states and through eOrganic. The team will submit one article on each topic for peer-reviewed publication on eOrganic. The topics will be focused on Michigan, Indiana and Illinois organic professional development. However by hosting and promoting this series on eOrganic, the webinars will be available to other educators seeking sustainable organic professional development within the NCR and other SARE regions.

PDP Budget: Initiative Cost: \$15,000; (Note: \$5,000 each has been moved from the IN and IL POW budgets to the MI POW budget to support this tri-state initiative)

Outcomes/Evaluation: See Program Logic Models, Table 3.

N3. Youth educator professional development

Audience: 4-H educators, FFA educators and Intermediate and High School Ag educators

Initiative: The advisory group identified Youth educators as an under-served population for professional development in sustainable agricultural principals. Funding will be provided for Youth educators to travel to sustainable agriculture conferences and workshops and mini-grants to develop and implement programs for youth educators in sustainable agriculture. This initiative will focus on increasing knowledge and materials for Youth educators to use in their educational curriculums.

Justification: Michigan Youth educators have shown a positive response to the NCR-SARE Youth Educator Grant Program. In 2009, 18 educators submitted proposals for funding. Due to the limited resources available from NCR-SARE, only two were funded. Many of these educators have great ideas for educating Michigan youths in sustainable practices that can be developed and shared with their colleagues. Including sustainable agricultural principals in the education of the next generation of Michigan residents will have a long-term benefit to agriculture in Michigan.

Activities: A Youth educator travel scholarship and mini-grant program will be developed, promoted and implemented in Michigan.

PDP Budget: Mini-grants: \$2,000; Travel Scholarships: \$1,000

Outcomes/Evaluation: See Program Logic Models, Table 4

Attachment 1: Advisory Group/Stakeholder Group Membership and Tentative Schedule of Meetings

Member name	Affiliation
Andrea Buchholz	MSU
Jim Bingen	MSU & MOFFA (NGO)
Mike Brewer	MSU
Elaine Brown	MIFFS (NGO)
Betsy Dierberger	NRCS
Tim Harrigan	MSU
Dan Hudson	MSUE
Jim Koan	Farmer & former NCR-SARE AC member
Dean Krauskopf	MSUE
Larry Leach	CSA and farmer
Gary Manley	Ag consultant and farmer
Juan Marinez	MSUE & NCR-SARE AC member
Laura Probyn	MSUE
Dan Rajzer	MSUE
Natalie Rector	MSUE
Robin Rosenbaum	MDA
Dan Rossman	MSUE
Mark Seamon	MSUE
John Simmons	Organic farmer
Robert Serrine	MSUE

Purpose of Meeting	Tentative Date
Teleconference	February 2010
Advisory Group Meeting	April 2010
Teleconference	June 2010
Teleconference	August 2010
Teleconference	October 2010
Advisory Group Meeting	November 2010
Other Teleconferences	As Needed

Program Logic Models

Table 1: E1. Sustainable animal production

Intermediate Outcomes**	Short Term Outcomes *	Outcome Measures	Outputs (including # participating)	Activities	Inputs
<p>-Changes in attitude toward nutrient management and the inclusion of sustainable principles in a wider range of Extension and education programming.</p> <p>-10 educators will deliver educational programs addressing sustainable animal production and nutrient management.</p>	<p>-20 educators will increase their knowledge about sustainable animal production systems.</p> <p>-Mini-grants funded for plot and animal demonstration projects will reach 60 farmers and stakeholders.</p>	<p>-Educator workshop attendance.</p> <p>-Mini-grants awarded.</p> <p>-Pre- and post-project surveys will be used to assess professional development and changes in knowledge and attitudes.</p> <p>-Follow-up surveys to evaluate increase in sustainable animal production programming and effectiveness of direct delivery to farmers.</p>	<p>-2-4 mini-grants will be funded supporting education and demonstration projects.</p> <p>-3-6 travel scholarships will be funded for educator training in sustainable animal production.</p> <p>-New partnerships across disciplines will be established.</p>	<p>-Promote sustainable animal production mini-grants and travel scholarships.</p> <p>-Survey participants post event.</p> <p>-Evaluate mini-grant projects.</p>	<p>-NCR-SARE funds.</p> <p>-Partner funds.</p> <p>-State coordinator time.</p> <p>-MSU specialists' time.</p> <p>-MSU educators' time.</p> <p>-Subcommittee time.</p> <p>-Field days/ tours.</p>

Table 2: E2. Additional sustainable agriculture support

Intermediate Outcomes**	Short Term Outcomes *	Outcome Measures	Outputs (including # participating)	Activities	Inputs
<p>-Changes in attitude toward sustainable agriculture and its inclusion in a wider range of Extension and education programming.</p> <p>-15 educators will deliver educational programs including sustainable agriculture practices.</p>	<p>-10 educators will increase their knowledge about sustainable agriculture practices.</p> <p>-Mini-grants and travel scholarships funded for sustainable agriculture education and projects.</p>	<p>-Educator conference attendance.</p> <p>-Mini-grants & Travel Scholarships awarded.</p> <p>-Pre- and post-project surveys to assess professional development and changes in knowledge.</p> <p>-Follow-up surveys to evaluate direct delivery to farmers.</p>	<p>-1-2 mini-grants will be funded supporting education and demonstration projects.</p> <p>-2-4 travel scholarships will be funded for educator training in sustainable agriculture practices.</p>	<p>-Promote mini-grants and travel scholarships.</p> <p>-Survey participants post event.</p> <p>-Evaluate mini-grant projects.</p>	<p>-NCR-SARE funds.</p> <p>-Partner funds.</p> <p>-State coordinator time.</p> <p>-Educators' time.</p>

Table 3: N2. Sustainable organic agriculture – New Agriculture Network (NAN) Webinars

Intermediate Outcomes**	Short Term Outcomes *	Outcome Measures	Outputs (including # participating)	Activities	Inputs
<p>-10 - 15 educators will use organic and sustainable information from NAN webinars and eOrganic for their materials, programs and demonstrations.</p>	<p>-Key educator and review team increase knowledge of organic topics. -15 - 20 educators will increase knowledge of sustainable organic farming through webinars. -15 - 20 new educators will access organic information from the NAN website.</p>	<p>-Survey NAN webinar participants on program quality and use of information. -Quantify the number of NAN website visits and hits for organic information. -Track the number of NAN articles accessed through eOrganic. -Pre- and post-surveys of NAN webinar project team.</p>	<p>-5 webinars through eOrganic on sustainable organic agriculture topics for MI, IN and IL. -Information resources for the 5 webinars/topics -Publication of at least 5 NAN peer-reviewed organic articles on eOrganic. -Increase the presence of Midwest organic agriculture information within eOrganic.</p>	<p>-Identify key educator will be to implement this initiative. -Identify educator review team w/ 2 representatives from each state, -Team collaboration to develop webinar curricula and information for 5 webinar topics. -Support and promote webinars. -Work with eOrganic to promote and host webinars.</p>	<p>-Michigan State University -Purdue University -University of Illinois -NAN Administrative Staff -SARE Coordinators -MSU, PU and UI will each contribute \$5,000 towards this multi-state PDP initiative</p>

Table 4: N3. Youth educator professional development

Intermediate Outcomes**	Short Term Outcomes *	Outcome Measures	Outputs (including # participating)	Activities	Inputs
-Changes in knowledge and attitude of Youth educators toward sustainable agriculture. -20 Youth educators will incorporate sustainable agriculture principals into new and existing curriculum.	-10 Youth educators will increase their knowledge about sustainable agriculture -Mini-grants funded for Youth educators. -Travel scholarships funded for Youth educators	-Educator conference attendance. -Mini-grants awarded. -Pre- and post-project surveys will be used to assess professional development and changes in knowledge. -Follow-up surveys to evaluate use of information in new and existing curriculum.	-2-4 mini-grants will be funded supporting program development for Youth educators in sustainable agriculture. -3-6 travel scholarships will be funded for Youth educator training in sustainable agriculture.	-Develop Youth educator program. -Promote Youth educator mini-grants and travel scholarships. -Survey participants post event. -Evaluate mini-grant projects.	-NCR-SARE funds. -Partner funds. -State coordinator time. -Youth educator time.

* **Short Term Outcomes:** Learning, Awareness, Knowledge, Attitudes, Skills, Opinions, Aspirations, Motivations

** **Intermediate Outcomes:** Action, Behavior, Practice, Decision-making, Policies, Social Action

(UW Cooperative Extension-Program Development & Evaluation 2003)