

Shared Leadership, Shared Responsibility and Shared Rewards
A Model for Sustainable Agriculture Programming
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Lessons from the Past - Sustainable Agriculture in Missouri

After five years of hard work, deep thought, and furious activity on my part, the Sustainable Agriculture program at the University of Missouri was still virtually non-existent. I had come to the University of Missouri in early 1989 to build a new educational program around the newly emerging issue of sustainable agriculture. Much of my time during the first year or two was devoted to a USDA funded Low Input Sustainable Agriculture (LISA) project, but the intent from the beginning was to develop a strong sustainable agriculture educational program for the people of the state of Missouri. Missouri's agricultural resources - its farms, its land, and its people - are inherently diverse and generally not well suited for specialized, large-scale agriculture. Sustainable agriculture -- with its emphasis on diversity, site-specificity, and individuality - seemed an ideal approach to farming in Missouri. But after five years, the results of the best efforts of an experienced extension professional - with a reasonably good record for past success - could most accurately be describes as a "dismal failure."

I only relate this personal story in the hopes that it might help keep others from making the same mistakes. With 20 years of professional experience in three states under my belt when I came to Missouri, I thought I knew how to develop an extension program. We would pull together all available research-based information relevant to sustainable agriculture and then gather as many as possible of the researchers who had developed it. We would inspire them to embrace sustainable agriculture as a means of bringing greater recognition of the value of their previous work and of gaining increased funding for the work they wanted to do in the future.

We would help establish a close working relationship between researchers and campus-based extension specialists. This would ensure the "packaging and delivery" of the most relevant and useful information by the most efficient means. We would help extension field staff discover the problems and opportunities of farmers as they relate to sustainable agriculture and would help them deliver the information farmers needed to solve their problems and realize their opportunities. Finally, we would keep the lines of two-way communication open -- from farmers, through extension workers, to researchers - to ensure the relevance of future research to solving farmers' problems. That's the way good extension work is done.

The only problem was -- the "way good extension work is done" didn't work. We conducted seminars on campus featuring outside experts as well as respected insiders. Quite a few people came at first, but few bought into the new agenda -- interest soon dwindled. We bought them lunches for program planning sessions and bought them breakfast for information sharing sessions - but the modest numbers at first dwindled to a few and then only one or two. We brought together farmers and others from

commodity groups and farm organizations to determine what farmers needed and wanted from the LISA program. But, our farmers - like our researchers and extension workers - were not so sure that they even liked LISA.

Even after the LI was dropped from LISA, interest in the "S word" was less than burning. We were successful in securing sufficient grant funds to keep the Center for Sustainable Agriculture going at MU. The University has never invested much more than half of a FTE in faculty support plus a few in-kind dollars here and there. Adding a few folks to the grant payroll resulted in at least a small core of three to four people actually working on sustainable agriculture projects at any given time. When we completed research projects, we disseminated the results by every means available - from journal articles to press conferences. We published a newsletter and manned a display at every exhibition we could find. We participated in every extension program planning activity that came down the pike. We presented our program at every opportunity to tell our own folks and others what sustainable agriculture was all about.

For Extension programming, we developed a sustainable agriculture "initiative" and a sustainable agriculture "work group," and even jumped through all the hoops for a sustainable agriculture "focus team" - although the latter request was denied by an administration that still had problems with the "S word." (Only later would it become apparent that the problem wasn't really the S word, it was the implication of the S word for the way we did business in extension.) All of these programming efforts seemed to be yielding little fruit.

After three or four years of frustration, I decided maybe Missouri didn't need a Center for Sustainable Agriculture, or even a Sustainable Agriculture Program. Maybe we needed instead to work the concept of sustainability into programs that were led by other people. Maybe the problem was that others thought supporting sustainable agriculture would somehow diminish the perceived value of their own programs. Maybe we just needed to talk to folks one-on-one explain that we weren't trying to build an empire and didn't want to take over anything. We could explain that we just wanted to get people to thinking more long term - to help meet the needs of the current generation while leaving equal or better opportunities for those of generations to follow. How threatening could that be?

The Management Intensive Grazing (MIG) program in Missouri appeared to be a good place to start. The MIG folks were good people and had received a couple of Sustainable Agriculture Research and Education (SARE) grants to support their work. They knew what sustainable agriculture was about and at least were not ideologically opposed to the concept. In addition, Missouri ranks 2nd among states in beef cows and most of the beef cowherds are small, pasture-based operations. MIG had a good research base in Missouri and was a documented means of increasing productivity per acre. A Sustainable Grassland Farming program seemed a sure winner.

I visited every person in every office at the University and at the State Capital that had anything to do with cattle, pastures, or grazing systems in Missouri. We wanted to make

sure there were no miscommunications this time. We asked the Dean of the College to form a planning committee - which he did - to discuss the possibility of a new Sustainable Grasslands Farming program. We suggested that he ask someone not affiliated with the Sustainable Agriculture program to provide leadership for the program. We even met with the Dean in his office. All appeared to be going well. So we planned a special program during Agriculture Science Week to present the new Sustainable Grasslands Farming program to the agricultural community. It would take the place of our annual Sustainable Agriculture Seminar that year.

The Sustainable Grassland Farming committee planned the Agriculture Science Week program - just to ensure that we had a diversity of perspectives represented. The program included a reaction panel that included a couple of extension workers, a farmer or two, and a couple of others from the agricultural establishment. Following my presentation of the outline of the program, the panel reacted. To my disbelief, the panel opened up with a "broadside" against just about everything I had proposed. Some of my colleagues had set me up for public humiliation. They had found others to say in public the things they had not had the courage to say in private. They said the program was not needed because our programs were already sustainable, that it was divisive because it implied that current beef production was not sustainable, that the needs of small farmers were no different than large farmers, and that farming for sustainability was no different from farming for maximum production or profits.

The Sustainable Grassland Farming program "crashed on take-off." Interestingly enough, a new college-wide, grazing task force was formed a year later. The new task force, with no sustainable agriculture connection, addresses the opportunities for grassland farming in Missouri, but from a conventional, commercial agriculture perspective. Following the "crash," or should I say "bombing," I asked that the Sustainable Agriculture Program be folded into the Center for Agricultural Resources and Environmental Systems and it ceased to function as a separate program. Sustainable Agriculture at Missouri went "underground."

Luckily, the Sustainable Agriculture Professional Development Program (SARE PDP, initially called SARE Chapter 3) received its first funding at about this time. A fortunate provision of the SARE PDP program was a mandated partnership between 1862 Land Grant Universities (University of Missouri) and 1890 Land Grant Universities (Lincoln University) in each state having both. We had included Lincoln University in many of our earlier programming efforts, but this provision gave us an obligation to develop a single, integrated sustainable agriculture program. Lincoln University has primary responsibility for the Small Farm Family Program (SFFP) in Missouri. Approximately 20 Educational Assistants in this program work one-on-one with farmers over an extended period of time to help them achieve a decent quality of life using whatever land and capital they happen to have at hand. The focus is on people. Production and profit are important only if they enhance the quality of life of people. A marriage between the small farm and sustainable agriculture programs seemed to be a natural for Missouri.

With the Lincoln U/Missouri U partnership and a little seed money from the SARE PDP program, Sustainable Agriculture in Missouri moved off in a new and different direction. First, we went to the people - the farmers who worked the land and common rural people - rather than to commodity groups and the agricultural establishment. We asked for advice as to what we should do and how we should do it. Members of our first statewide, farmer-oriented planning group told us to travel around the state and listen to a lot more people before we did anything else. This program needed to be driven by the people on the land and in the small towns - not those in the offices and boardrooms.

Missouri's SARE strategic plan for sustainable agriculture extension programs was based on input from about 250 people who attended eight "listening sessions" held all across the state. A serious effort was made to do something more than "round up the usual suspects" for these sessions. We tried to involve our extension field staff in getting those people to attend who generally wouldn't go to something of this nature - those who thought no one would be interested in what they had to say. The people showed up and we listened to what they had to say. We only had two or three general questions developed before hand to get the discussion started and keep it going if needed. The latter generally wasn't needed. For two to three hours at most locations, we would mostly just listen and take notes. The extension folks were also asked to take notes to minimize biased listening. Ultimately, those notes were included as an appendix to our state strategic plan.

In the process of conducting the listening sessions, we were able to identify a select group of extension field staff who shared our concerns for the well being of people - those farm families who have not been well-served by previous extension programs. The listening sessions validated the fact that needs of many farmers in the state of Missouri were not being met by our current educational programs. The sessions validated also that sustainable agriculture provided a logical, reasonable means of addressing those needs. The extension workers who attended these sessions were empowered by their constituents - if not by their administrators - to at least consider sustainable agriculture as a programming alternative. We invited all extension workers in Missouri to join in forming a Sustainable Agriculture Extension Work Group (SAEWG) and nearly 30 UM extension field workers responded. The LU Small Farm Family Educational Assistants (20 or so at the time) all become members of the SAEWG. Now, we not only had direction from the grass roots, but we had an all-volunteer workgroup to help write and implement the sustainable agriculture educational agenda for Missouri.

From that point on the sustainable agriculture program flourished and grew. Lacking funding and support from University administration, we were forced to delegate virtually everything to the volunteer group of extension regional specialists and educational assistants. We have hustled grant money at the state level to pay travel expenses and basic operating and materials costs of programs. But, SAEWG group members have decided what programs they wanted and which of those will be conducted - the latter by volunteering to assume leadership and to do the work involved in making a specific program happen. We have provided funding for those volunteers to enhance their expertise, through individualized professional development experiences, so they might

carry out their volunteer responsibilities to the best of their capabilities. We also invited all members of the SAEWG to attend out-of-state regional professional development programs to broaden and deepen their understanding of sustainability. (The theme for one of these regional PDP, by the way, was Shared Leadership and Shared Responsibility.) We attempted to reward those who were willing to accept responsibilities.

In the three years following development of Missouri's strategic plan, we have offered from seven to eleven statewide professional development opportunities each year related to sustainable agriculture. The sustainable agriculture program has paid travel expenses and direct programming costs, but the field staff has done the rest. The programs have been well attended and highly evaluated. The numbers of programs and participants are not overly important, and descriptions of the programs are not particularly relevant. The important point is, by sharing leadership and sharing responsibilities, we have been able to carry out a "steak and salad" professional development program on a "beans and potato" budget. The rewards have been programs that met the needs of the people who attended them - basically the same people who planned and conducted them - and furthered the educational agenda for sustainable agriculture in Missouri.

The lessons learned from our experiences in sharing leadership, responsibilities, and rewards are now guiding us in another new direction in sustainable agriculture programming in Missouri. During the past year, our program emphasis has shifted toward greater involvement of farmers, far greater than ever before, in all programming activities. Our extension team is now sharing leadership, responsibilities, and rewards with our farmers - not in the usual sense of "extension advisory committees," but with farmers as full partners in the learning/teaching process.

This approach has some of its roots in the Missouri Sustainable Agriculture Demonstration Awards program -- a state-funded program that awards of up to \$3,000 to a maximum of 23 farmers each year to explore their own ideas on their own farms and to share what they learn with other farmers. The program had been authorized in the early 90s but did not receive funding until 1995. Since that time, it has gained fairly wide recognition as a program that effectively meets the needs of a significant group of farmers - those ignored by most other programs -- at a very reasonable cost. Helping farmers who think for themselves to do things for themselves seemed to be an approach that was working well for sustainable agriculture in Missouri. But, farmer involvement also has been a cornerstone principle of the SARE program since its inception.

Now, every professional development program in Missouri is targeted to meet the expressed, immediate needs of farmers. For example, during 1998 our programming emphasis turned toward organic farming. This was a direct response to a growing awareness among farmers of viable organic markets and of the potential role of organic methods in sustainable farming. Extension workers and other information providers participated as co-learners with farmers in all of these programs.

In our sustainable agriculture programs, there are no experts and clients, no teachers and students - we are all co-learners. We have active, working farmers on every program planning committee. We have farmers as "instructors" on every program - sometimes as the only "instructors" on programs. We don't necessarily compensate farmers for their expertise, but we do give them enough money to pay someone to do the chores at home when we ask them to be on a program. Sometimes farmers make formal presentations and sometimes they are on panels, but they are always there - as much in the role of teacher as student.

We are also committed to helping farmers form their own sustainable agriculture network(s) in Missouri so they can more effectively provide leadership for, take responsibility for, and share in the rewards of their own programs. We did not attempt to form such a group in Missouri, but waited for one to form. In the spring of 1998, during our first statewide sustainable agriculture conference, the program included a farmer panel -- planned by a farmer -- on the topic of farmer networks. We had a couple of farmers representing networks from other states on that panel. A group of Missouri farmers attending this session decided on the spot that they wanted to call an ad hoc meeting that evening to explore the possibility of starting a farmer network in Missouri.

Since that time, the group has elected officers who have had several meetings, both in person and on the phone. They have started a newsletter, have participated in various hearings and advisory situations, have been on television and in the print media several times, and show signs of becoming a viable grass roots farm organization. The group is planning their first statewide meeting for March 1999. The sustainable agriculture program is facilitating the work of the farmers' network, but is neither leading, doing all the work, nor providing significant funding. The success or failure of the group rests clearly in the hands of the farmers.

Our goal has become to truly share in the leadership, responsibility, and rewards of every program in sustainable agriculture that we carry out in the state. Before we began to adopt this philosophy, our programs were a dismal failure. Since we have begun to adopt this philosophy, our programs have become increasingly successful. Our programs in Missouri are still not exemplary of what a statewide sustainable agriculture extension program could and should be - but our programs are a whole lot better today than a few years ago. Sure there has been a widening acceptance of sustainable agriculture as a legitimate issue for agriculture. But there are also growing attempts to co-opt sustainable agriculture and drown it in mainstream, industrial farming. Our Missouri experience proves nothing, but it is an illustration. Effective sustainable agriculture will require something fundamentally different from "business as usual" in carrying out extension education and outreach programs for farmers.

Vision for the Future - A New Programming Model for Sustainable Agriculture

"A Strategic Plan for Agriculture" - USDA's agriculture and natural resource national program planning document adopted by ECOP in 1994 - includes the following statement in its opening paragraph:

The Cooperative Extension System (CES) in this country is at a crossroads. The actions (or in-actions) of today will determine Extension's future, but one thing is certain - the days ahead will not consist of "business as usual." The clock is running; there simply is not much time to decide what changes are needed, and then to implement those changes.

The document goes on to point out that societal expectations for the environment and for agriculture have changed, and that the current system lacks the flexibility to truly address the needs and to determine what it can and will do. "In this era of rapid, unpredictable change, the current system cannot respond quickly enough to meet the needs of the clientele." The task force members and other resource people made it clear that the CES needs to identify and implement approaches that will improve its ability to respond to the needs of the agricultural sector and of society as a whole. The document pleads with CES as an organization to develop a new "Shared Vision and Mission" for agricultural programs suitable for the CES in the dynamic society of the future.

The strategic planning report was presented to the USDA and State CES leadership in Washington, DC and at the National County Agents Association meeting in Casper, WY in 1994. It was promptly buried in the files of most state ANR Program Leaders shortly thereafter and has rarely been mentioned since. However, that document outlines a "Collaborative, Networking Model for Extension Programming" that provides a clear logic for the early failures and later successes of Sustainable Agriculture Extension programs in Missouri - and I would bet for programs elsewhere all across the country.

The following is taken directly from the 1994 planning document (beginning on page 19).

The traditional model for Extension programming may be characterized as a system of technology development and transfer. Research-based information is the foundation for Extension educational programs. Once research is completed, Extension workers translate the results into readily usable form and disseminate information back to their constituents. Using the traditional model, Extension workers attempt to identify problems and opportunities that are common among significant segments of their constituency that can be addressed using the research capacity of their respective land-grant universities. In cases where relevant research based information is not readily available, Extension workers either conduct adaptive research or encourage their research counterparts to conduct research that will address the relevant issues.

The traditional information model (Figure 1) is relevant, efficient, and appropriate in situations (1) where common problems and opportunities have common solutions for significant segments of Extension's constituency, (2) when problems are relatively static or persistent over

time, and (3) when information needed to address those issues is not available from other sources.

However, in many situations, problems and opportunities (1) may be site-specific and more or less unique to individual constituents or small groups, (2) must be addressed quickly if problems are to be solved, or (3) may be addressed by using information available from sources other than State land-grant universities.

A wide range of alternatives to the traditional model of technology development and transfer is needed to address problems and opportunities of constituents that are individualistic, site-specific, and dynamic; or when necessary information is readily available from some sources outside the Land-grant University.

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Figure 1. The Traditional Model of Information Flow.

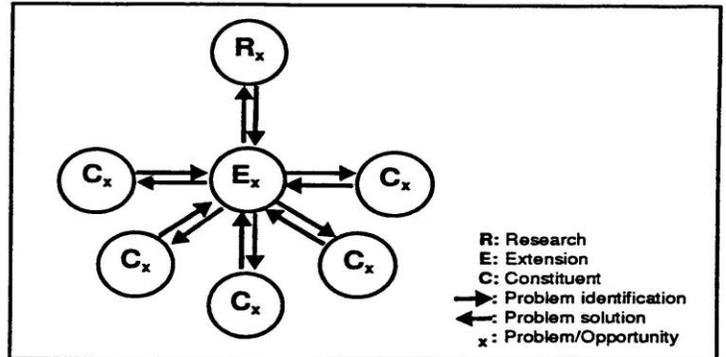
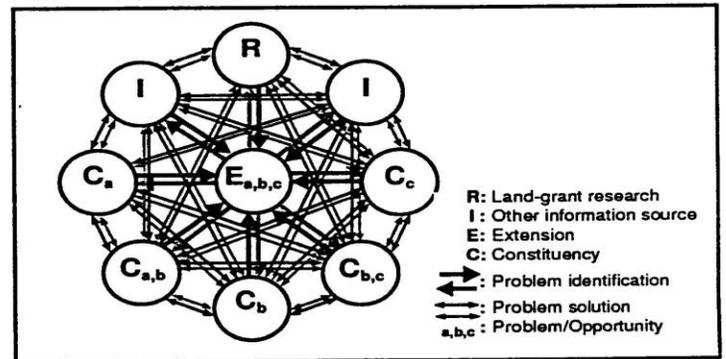
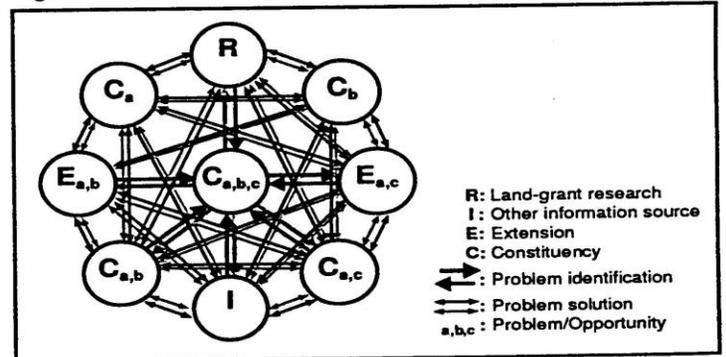


Figure 2. Networking Model of Information Flow.



The networking model allows Extension workers to focus on the empowerment of people.

Figure 3. Constituent Empowerment Process



A more universal model (Figure 2) incorporates the traditional model, which can be employed when needed, for information and education linked to technology transfer. The networking model (1) uses research-based information from all available sources, (2) enables constituents to bypass the CES to obtain information directly from research sources when the information is available in readily usable form, and (3) encourages and

supports constituents in forming networks to exchange information and in conducting their own research where appropriate.

An important programmatic aspect of the networking modes is that it shifts program emphasis to the problems and opportunities of people and away from the programs focused solely on technology transfer, regardless of the origin of technology. Thus, it places greater emphasis on the role of Extension workers as facilitators of information exchange and networking and less emphasis on the traditional role of technology transfer. The networking model encourages people to fulfill their needs, solve their problems, realize their opportunities and shape their own destinies. In short, the networking model allows Extension workers to focus on the empowerment of people.

A shared vision of CES as an organization and its mission evolves naturally from continuous, meaningful communications among Extension workers throughout the organization and between CES and those within and outside the organization, including the Extension constituency. The people-oriented model of learning and teaching (Figure 3) can unleash the full knowledge-generating potential of CES as a dynamic learning organization.

Obviously CES as an organization has not embraced the proposed networking model for programming. CES is still very much an educational organization dominated by the traditional technology development and transfer model. The traditional model has served the needs of industrial agriculture very well, where technological fixes to common problems - typically labeled as "best management practices" - tend to be applicable under a wide range of physical and managerial environments. However, the traditional model simply is not compatible with the fundamental nature of problems and opportunities in sustainable agriculture.

A New Way of Programming for a New Way of Thinking

A sustainable agriculture must be capable of meeting the needs of those of the current generation -- while leaving equal or better opportunities for those of generations to follow. Sustainable farming systems must be ecologically sound, economically viable, and socially responsible. All are necessary and none alone or in pairs is sufficient. All are objectives and none are constraints. Thus, the goal is to develop farming systems that are in harmony with their economic, ecological, and social environment.

Sustainability presumes there is some higher order of nature, including human nature, to which farming systems must conform. We cannot simply do whatever we are capable of doing, wherever we choose to do it, whenever we choose to do it. We may be able to twist and bend nature to fit our needs in the short run, but nature fights back. We must farm in harmony with the God-given nature of the places in which we farm if our farms are to be sustainable. We must farm in harmony with the God-given nature of the

people who farm - the farmer and the farm family - and the people who live and work in rural communities, if our farms are to be sustainable. Nature is inherently diverse and people are inherently individualistic. To farm sustainably, the diversity and individuality of our system of farming must match the diversity of the places we farm and the people who farm them.

Farming inherently is a biological and social process - a farm is a living organism made up of living organisms. Plants and animals are alive, the land is alive, the people who farm the land are alive and they all interrelate to form this entity we call a farm. Biological processes are inherently dynamic processes - things are born, they grow, and they die, and the relationships among them are ever changing. To farm sustainably, our systems of farming must be as dynamic as the living systems we must manage in the process of farming.

Sustainable agriculture epitomizes the model of a site-specific, individualistic, dynamic system. Just as sustainable farming systems must be in harmony with the nature of things to which they are applied, I believe the nature of our sustainable agriculture educational programs must be in harmony with the nature of the things to which they are applied - to sustainable farming systems. Thus, it seems only logical that our models for educational programming should be models appropriate for site-specific, individualistic, dynamic systems of farming.

The traditional technology development and transfer model of extension is clearly not appropriate for site-specific, individualistic, dynamic systems. The people-empowering, networking model seems far more promising. Although the new model may seem complex at first, it is really quite simple to implement - we just need to learn to share leadership, share responsibility, and share the rewards. We will have to give up some of the prestige of being the "sage on the stage" and learn to become the "guide on the side" - as one of my colleagues likes to state it. Many additional lessons will most certainly be learned as we move toward broader implementation of the networking model for extension programming. However, the Missouri example provides strong evidence at least that it "can" work better than the way we traditionally have done things in Extension. One thing seems perfectly clear -- if we are to meet the needs of farmers and society with respect to sustainable agriculture, we simply cannot continue "business as usual."