

(i) Introduction.

1. *Program Staff* – include name, title, affiliation, address, and e-mail for PD(s), CoPD(s) and Key Personnel.

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Steve Bosserman, President, Bosserman and Associates, Inc.;

Michigan: Michigan State University, Michael Hamm, Cheryl Danley, Susan Smalley C. S. Mott Group for Sustainable Food Systems;

Illinois: American Farmland Trust, Anita Zurbrugg; University of Illinois, Michelle Wander, Agroecology and Sustainable Agriculture Program;

Wisconsin: Green Leaf Market, Heather Hilleren;

Minnesota: University of Minnesota, Maggi Adamek, Regional Sustainable Development Partnerships

Indiana:

Iowa: Iowa State University, Abigail Gaffey, Community and Economic Development

Kentucky:

West Virginia:

Pennsylvania: Mary Barberchek, Penn State and PASA.

2. Provide a *clear statement of the long-term goal(s), the critical need(s) of specialty crop industries* being addressed, and supporting outreach objectives or research questions.

Specialty crop growers, packers, processors and retailers have excellent opportunities in local food systems. The US is in the early stages of building local economies, however, and they will require networking and collaboration at unprecedented levels both within and among localities. This project will build the networking capability by addressing both the social and the technical aspects of building local food systems to provide greater opportunities for business that focus on specialty crops, particularly fruit and vegetables, in the Midwest. Building these systems will require the following outreach and research objectives:

Extension needs: To meet the localization goals and objectives outlined above requires a strong portfolio of tools and techniques covering virtual and face-to-face communications. The result is an information and communication process that draws upon websites, email, phone, personal interviews, small group sessions, and large-scale conferences to convene people around localized agendas that are immediately relevant and meaningful to those involved.

Application of moderation skills engages broad stakeholder groups in online communication venues, like the [Ohio Local Food Systems Collaborative](#) (OLFSC), about local food systems where they can work openly and in parallel, deepen their understanding of one another, build trust in each other, downplay internal competitiveness, envision preferred futures worth having, and move towards collaboration within their particular neighborhoods, across clusters of multiple communities, or scaled up to the Midwest region and beyond to bring those futures into fruition.

Tactically, these steps initiate a steady stream of observations, ideas, and insights from which viable community and business plans are developed that focus on specific outcomes in building local food system infrastructure, projects are chartered, rampant experimentation occurs in

multiple locations concurrently, and adjustments are made for future actions to maintain the integrity of the original vision of healthy, vibrant local economies throughout the region.

Research needs: Research is needed to support the local food system generation in several key areas (examples that fit current research here, we are open to adding additional objectives):

1. An inventory of current and potential fruit and vegetable production, processing, delivery, and retail capability throughout the region, to target efforts for local food systems.
2. Social science research on the adaptation of communication and collaboration styles and technologies for various groups along the supply chain from producer to consumer.
3. Documentation of network development and pace of the transition from communication to collaboration in building local food system infrastructure.

Each of these research areas will require collaboration and contribution from the academic institutions that are participating in the project.

3. Describe the *legislatively mandated focus areas being addressed*, and provide an estimate of the percentage of funds dedicated to each (sum of percentages should equal 100 percent).

This proposal is for a Regional Partnership for Innovation, which will provide the local and regional infrastructure needed to fully develop the commercialization and adoption of local food systems. We are proposing the active expansion of networks that include universities, local governments, financial stakeholders, end-user industries, manufacturers, community organizations, etc., using innovative social networking technology and expert facilitation and network coordination. This network is largely self-organizing once initiated and we expect it to be self-supporting by the end of a grant's project period.

Among the five legislatively mandated focus areas, we expect the following percentages of effort and impact:

1. Research in plant breeding, genetics, and genomics to improve crop characteristics: 0%
2. Efforts to identify and address threats from pests and diseases: 0%
3. Efforts to improve production efficiency, productivity, and profitability over the long term: 70%
4. New innovations and technology: 25%
5. Methods to prevent, detect, monitor, control, and respond to potential food safety hazards in the production and processing of specialty crops, including fresh produce: 5%

4. Describe *how stakeholders were engaged to identify project goals and objectives*, and as appropriate how stakeholder involvement will continue.

This project began at the 1st Annual Stinner Summit, September 2007, Coshocton, OH, a gathering funded by the Ben Stinner Endowment for Healthy Agroecosystems and Sustainable Communities. The objective of the Summit is to select one project to which all participants, a wide range of stakeholders interested in the goals of the endowment, are willing to contribute. The project selected for 2007-2008 was a workshop on building local food systems

infrastructure. The organizing committee for the workshop approved establishment of a social networking site to continue the networking after the workshop. The Leap into Local Foods workshop was held on February 29, 2008, at the Ohio Department of Agriculture in Reynoldsburg, and the network established that day has continued to grow with open access for the diverse stakeholder community involved with local food systems in Ohio and beyond. The networking takes place through working groups, one of which is a Regional and National Partners group.

5. Summarize the *body of knowledge or other past activities* that substantiate the need for the proposed project.

The recent and substantial rise in energy prices is challenging the supremacy of globalization as the preferred economic system. Globalization predominated while fossil fuels were relatively plentiful and cheap. Concerns about climate change, peak oil, and political consequences caused by dependence on fossil fuels have accelerated a shift towards localization as a counterbalance to globalization.

In a healthy interrelationship between the two, localization establishes sustainable communities and neighborhoods wherein members may participate, individually, in the global economy yet they contribute, collectively, to their common welfare and shape their shared future within vital and vibrant local economies.

Localization is about people in neighborhoods and communities within a specific region taking the best technology available and working together collaboratively to produce and distribute their food, generate their energy, manufacture critical materials and goods and provide attendant services. Localization interweaves social and technical paths to form integrated local economic systems. This blending is a hallmark of localization.

Establishing local food systems is a critical element of successful localization. However, since WWII—the last hurrah for local food systems in the Midwest—production agriculture has become commoditized extending beyond grains to include fresh fruits and vegetables. It has also become increasingly globalized with fresh food production for retail and consumption in the Midwest moving to the South, Southwest, and outside of the United States. The Midwest has retained production of some processed vegetables such as tomatoes, potatoes, sweet corn, beans, peas and cabbage. Closing the gap to 1944-45 production levels is a formidable challenge.

This gap is an opportunity. Given the universal need, value, and appreciation for food and current concerns about food access and security, building local food systems is the logical starting point for a localization strategy. Rebuilding the capability to supply the fresh fruits and vegetables needed in the region requires a collaborative capability among people that provides a foundation for all economic enterprises. It is the challenge of rebuilding local food systems better than before that is the foundation for this proposal.

6. Describe *ongoing or recently completed significant activities* related to the proposed project including the work of key project personnel. Applications should also demonstrate how duplication of effort with similar activities by others will be avoided.

We have embarked on the development of the collaborative network of people and organizations needed to build local food systems in Ohio. The networking began at the Leap into Local Foods Workshop, a gathering at the Ohio Department of Agriculture on February 29, 2008, that assembled people representing the Ohio food system in a stimulating dialogue (for more details see <http://www.oardc.ohio-state.edu/amp/news.asp>). The post-workshop dialogue continues. Participants are using social networking technology to move from communication to collaboration and business development about local food systems infrastructure in Ohio.

The social networking site that was established to enhance this process is the Ohio Local Food Systems Collaborative ([OLFSC](#)). It has grown from 90 to 173 subscribers in 4 months, and has doubled the number of working groups operating on the site. Participants include informal groups working on specific components of Ohio food systems, the Ohio Food Policy Advisory Council established by executive order of Governor Strickland, and a group of regional partners who are interested in bringing the same kind of networking capability to their own states. We now propose to take this collaborative networking, and the lessons learned so far, to the next level: regional participation and networking that will accelerate local food systems infrastructure development across a wider geographic area and link the emerging local systems regionally.

7. *Preliminary data/information pertinent to the proposed work* should be included in this section. All works cited should be referenced and attached at Field 8 on the Form, Bibliography & Reference Cited. Refer to Part V, 3.8 of the CSREES Grants.gov Application Guide.

(Literature review and past work on local food systems and opportunities for specialty crops, Statistics on network use to go here.)

(ii) **Rationale and Significance.** Concisely present the rationale behind the proposed research and/or extension. The specific relationship of the project's objectives to one or more of the SCRI focus areas should be shown clearly. These purposes and focus areas are described under Part I, B, Purpose and Priorities. Any novel ideas or contributions that the proposed project offers should also be discussed in this section.

Local food systems are an immediate change needed for the US economy to respond to current challenges in the realm of energy and the environment. For the Midwest in particular, fresh fruits and vegetables are supply-limited in local markets, offering substantial opportunities for producers. To be successful, however, local food systems must function holistically, their participants must contribute effectively in each system, and they must function interdependently in cohesive regional food systems. This requires attention to system design, learning new social skills featuring the most advanced communication technology available, collaboration, and developing technical skills as indicated through certification, licensure, and bonding in local food production, along with such allied capabilities as renewable energy production and green building methods. The challenge met by the proposed project is designing venues, processes, and tools that engage a critical mass of people in hands-on training and practical experiences and further develop their skills in these essential social and technical competencies.

(iii) **Approach.** The activities proposed or problems being addressed must be clearly stated and the approaches being applied clearly described. Specifically, this section must include:

1. *A description of the activities proposed*, key personnel or institution roles in those activities, and the sequence in which the activities are to be performed;

Local, State, Regional network building

Hold a state-wide workshop, initiate the state network, move to online communication, then to collaboration.

Pick up to 5 localities, neighborhood to township level, hold workshops, coach the network toward development of business plans.

Connect local, state networks in regional workshops, coach the network towards online communication and collaboration.

Complimentary and supporting research

Specialty crops local food systems assessment

Market and networking analysis

2. *Methods to be used* in carrying out the proposed project, including the feasibility of the methods (clearly describe the systems thinking used in the project methodology and the contribution of trans-disciplinary approaches);

We will proceed according to the following protocol for the pathway from communication to collaboration at each level, from local to regional. This protocol is based on our experience with the Ohio Local Food Systems Collaborative and is consistent with published methodology for successfully building and maintaining collaborative networks (Vandeventer, 2007). We expect each iteration of the process described to take about 9-12 months. As described above, we will begin at the state level in year one, move to the local level in year two and build to the regional level in year 3. In Ohio, we will have completed or nearly completed the work at the state level by the time this project would be initiated, therefore we will proceed in year 1 to the local level and transfer the lessons learned there to collaborating states in year 2.

Network protocol:

1. Communicate the purpose clearly to the stakeholder community involved with food systems: build local food system infrastructure for fruit and vegetable crops from producer to consumer;
2. Organize a workshop for these stakeholders;
2. Establish a social networking site during the workshop, using the face-to-face meeting to form working groups;
3. Expect networking activity to build slowly after the workshop, generate posts that maintain interest, refer to ideas and insights from the workshop, etc. to encourage reading and response;
4. Provide examples of useful, purposeful, communication;
 - Questions answered
 - Current events and research shared
 - Additional face-to-face, phone conference meetings organized
 - Ideas posted, etc.
5. Provide a carefully constructed example of moving from ideas to business plans;

Idea post(s) to introduce the rationale

Supporting comments, responses, additional posts to direct attention

Business plan post and offer to collaborate (OLFSC currently at this step)

6. Stimulate and facilitate adaptation, modification, replication.

Throughout this process, we will seek continuous feedback on the social networking site and other technology used to ensure that it functions as intended, making improvements in site features as they are identified.

3. *Expected outcomes*, including how the project expects to contribute to long-term profitability and sustainability of specialty crops;

Accelerating and deepening the growth in local food systems requires *a strategic framework for localization* that takes into consideration both technical and social dimensions. This framework expedites the following:

- *Creates new knowledge needed for localization*, combining pre-existing and practical know-how with current advances in the social and natural sciences and engineering.
- *Generates a flow of information and knowledge about localization* for timely transfer of learning and experiences among localities, i.e. share the wealth of know-how.
- *Develops skill-building curricula for social networking* that leads to open, widespread collaboration on building local food systems.
- *Develops education and training curricula for technical capabilities* that covers certification and bonding for practitioners.
- *Builds networks among localities* to create the effective counterbalance to the existing global system, opening a range of new scales in supply and demand.

Utilizing the strategic framework described above brings people and resources together to:

- *Support local food production in urban, periurban, and rural landscapes*, innovating with land use, enterprise diversity and season extension to address local supply and creating substantial new opportunities for fruit and vegetable producers.
- *Provide outlets for locally produced food to the public* in collaboration among producers and marketers through outlets such as produce stands, farmers' markets, convenience stores, grocery stores, food processors, food service, and food banks.
- *Implement a "zero-emissions" logistics system* that draws upon a community's collaborative and entrepreneurial capabilities to cover the care, packaging, storage, and delivery of food stuffs from the point of production to the point of consumption while reducing the carbon footprint and energy consumed to the lowest possible levels.

4. *Analysis*. Means by which results will be analyzed, assessed, or interpreted;

5. *How results or products will be used*;

6. *Outreach plan*: including, where appropriate, science-based tools disseminated, participants involved in delivery, and how impacts will be measured;

7. *Pitfalls* that may be encountered;

8. *Limitations* to proposed procedures; and

9. A full explanation of any materials, procedures, situations, or activities related to the project that may be hazardous to personnel, along with an outline or precautions to be exercised to avoid or mitigate the effects of such *hazards*.

Budget Justification: (Following are some very rough figures, to give you some idea of what could be involved with participating in the outreach social networking and collaboration portion of the project. Please keep in mind that these are likely to change as we progress with the proposal and incorporate the ideas and objectives of additional partners.)

Network building, social path:

Education, training, and networking resource assistance is required over a 3 year period to advance localization through open social networking and collaboration:

- Moderator(s) who can move information, develop agendas, connect, convene, and spark collaboration, process learning, and keep the vision foremost as entrepreneurial efforts take shape and business plans are executed.
\$100K / year for 3 years = \$300K
- Educator / trainer(s) who can develop and coordinate programs that result in skill development and certification for critical competencies in local food systems needed to start businesses, create jobs, and gin-up their local economies.
\$100K / year for 3 years = \$300K
- Coordinator(s) to set up workshops, arrange educational opportunities, schedule venues, work with local collaborators for successful meetings and follow-up activities.
\$30K/year for 3 years = \$90K

Network building, technological path:

Technical resource personnel will be required over the 3 year period to advance localization through information technology applied to social networking and collaboration:

- IT technical support to develop the architecture, load the tools, and service the users when there are glitches.
\$50K / year 1 and \$25K / years 2 and 3 = \$100K

Total investment for localization program over a 3 year period:

Year 1 = \$280K
Year 2 = \$255K
Year 3 = \$255K
Total = \$790K

Minimum commitment needed from regional partners: within state coordination of stakeholder community and networking, your state's share of the legislatively required 1:1 match, plus the matching for anything added to the budget for research and extension.

Your state's share of the match for building the networking and collaboration would depend on the level of involvement you'd like to put into this part of the project. We obviously have the

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experience and people to accomplish each of the steps outlined above, but we know that many of you have such resources as well. Following is the work that we can provide and the match we'd need (usually by dedicating a piece of someone's time to the project rather than coming up with cash, if you choose less support from us and want to write in salary support for your personnel to do the moderation, education etc. then you'd also need the match for that support).

Virtual support only, \$10,000/yr match

Virtual support plus on-site moderation/training for workshops, \$20,000/yr match

Virtual support plus on-site moderation/training plus on-site setup and preparation, \$30,000/yr match.

Again, we are very open to your ideas for contributing to the project but please keep in mind that you will need to address the required 1:1 match from non-federal funds for any support that you request.