North Central Regional Center for Rural Development
Message

from the Director
Greetings!

I’m pleased to present our annual report for 2012. It was an action-packed year as you will undoubtedly appreciate as you leaf through the more detailed descriptions that follow.

I conducted site visits to several 1994s in the region and participated in the annual First Americans Land Grant Consortium conference. The efforts paid off with a new biofuels grant that linked Bay Mills Community College, Ohio State University and Michigan State University. The study will, among other things, gauge community acceptance of new biofuel facilities in our region.

We strengthened our working relationships with the other three Regional Rural Development Centers via a successful USDA proposal to fund the National Agricultural and Rural Development Policy Center. The NARDeP Center is engaging land grant professionals from around the country in meaningful dialog about pressing rural public policy issues. The NCRCRD is host to Adam Reimer, a NARDeP post-doctoral fellow focusing on issues identification. Adam was the featured speaker on NARDeP’s inaugural webinar, on conservation policy options for the much-delayed farm bill.

In addition to our regular webinar contributors from the region, we continued the tradition started last year, partnering with the Economic Research Service on getting the word out to our stakeholders about their products, and responded to a legislative request to use our webinar series to help users navigate USDA Rural Development loan programs.

Finally, building on our experiences designing and delivering webinars is NCRCRD post-doctoral fellow, John Mann. John is creating a new series to help spread the word about “business-ready” innovation coming from ag-related land-grant scientists in the North Central region and exploring new ways to use social media to reach appropriate audiences for the work. He is also building a team to strengthen the regions leadership development for community curricula. Finally, he is investigating immigration as a regional economic development tool.

Please be in touch if you have ideas for the Center as we engage the region in furtherance of the land grant mission.

Sincerely,

Scott Loveridge
Director, NCRCRD
The NCRCRD is pleased to announce winners of its annual small grants competition. Each proposal goes through an independent review process involving blind reviewers with expertise in the proposal’s domain. Referee comments are reviewed by the NCRCRD board, which makes final recommendations for what is to be included in the Center’s annual proposal to the USDA.

**Small Grant Awards**

**Shifting Intermediaries: Tracing the Land Grant Role in Water Management in Nebraska**

**Principal Investigator:** Gasteyer, S. *(Michigan State University)*

**Co-PIs:** Knutson, C., Schutz, A., Wall, N. *(University of Nebraska-Lincoln)*

How land grant agricultural research, extension system, US Department of Agriculture, and other key actors influenced water supply and management from the 1920s to present in the arid Great Plains. We will use this knowledge to create a conceptual map of how local people access knowledge of technologies, practices, management systems, ideas and alternatives to current practice. The conceptual model will be used to clarify the role of land grant universities in fostering rural community resilience and sustainability in the context of increasing water scarcity and focus on the Republican River Basin in Nebraska, where irrigated and dry land farms produce corn, beans, and cattle, among other crops. Increasing recognition of water scarcity and water conflict has created restrictions on water withdrawals. Key stakeholders have identified new technologies, practices, and social systems as key to long term sustainable management of underground and surface water resources. Building on previous and ongoing research and outreach in the Basin, our project will use a multi-method approach to document where residents and decision makers in the Basin go for information, technologies, and practices. This knowledge will be used to identify new roles for land grant institutions in helping rural places in the arid Great Plains to address and respond to water scarcity.
Assist Farmers in Rural MI & WI in Making Informed Decisions About On-farm Scale Anaerobic Digesters

Principal Investigator: Gould, C. (Michigan State University)
Co-PIs: Haugen, V. and Larson, B. (University of Wisconsin-Madison), Kirk, D. (Michigan State University), and Rivin, J. (University of Wisconsin-Stevens Point)

The long term outcome of this project is to increase the economic prosperity of rural communities through renewable energy development. Achieving this goal requires some intermediate knowledge transfer steps. This grant proposes to support knowledge transfer steps by pulling together all that is known about the economics of installing, operating and maintaining a small digester and assembling it in such a way as to provide guidance in:

a. Setting the agenda for one 2013 small digester webinar
b. Providing background for a 2013 USDA North Central Region Sustainable Agriculture Research and Education (NCR SARE) grant funding proposal
c. Providing content for three case studies and one eXtension article

The 2013 small digester webinar will address the economic issues that were brought up at the 2011 small digester conference, while the USDA NCR SARE grant will focus on designing an anaerobic digester system that a 100-head dairy can afford.
Social Media Champions are business owners who are actively and successfully using innovative social media techniques in their marketing and promotional efforts. It is posited that these champions may serve as exemplars for other rural community businesses and facilitate the diffusion of social media technologies for small rural businesses. Researchers will use qualitative research methods to collect data that will enable identification of innovative best practices in social media used by small, rural businesses, and profile characteristics of social media champions to better understand their role in diffusing social media use in rural communities. Researchers will conduct interviews with rural business owners in three mid-western states who are seen as leaders in social media use to promote their businesses. Community climate and infrastructure that may facilitate or impede social media adoption for small community businesses will also be assessed. Following analysis of the data, researchers will develop a model of diffusion/adoption processes to identify factors that favor social media adoption by rural businesses. Case studies concerning best practices in social media by rural entrepreneurs will also be developed and disseminated through the national Extension website.
Utility Scale Renewable Energy Development - Project Siting & Conflict Resolution

**Principal Investigator**
Romich, E. (Ohio State University)

**Co-Principal Investigators**
Beyea, W. (Michigan State University), Hall, P. (The Ohio State University)

Rural communities throughout the Midwest are struggling to determine if large-scale wind and solar projects are acceptable to local residents and to assess the potential community development impacts. Residents in communities targeted by renewable energy projects have many questions related to the construction process, the environmental impacts, land use impacts, social impacts, and the economic impacts. Uncertainty and lack of information often leads to community conflict and various concerns raised at public hearings. Ongoing community conflict and resistance may prevent the expansion of utility scale renewable energy projects throughout the Midwest. Engaging citizens in outreach and community education on utility scale renewable energy projects can diminish potential community conflicts, while providing community leaders with best practices to facilitate the project siting process.

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Are we Ready? Community Leadership in the Disaster Cycle

**Principal Investigator**
Silvis, A. (University of Illinois Extension)

**Co-Principal Investigators**
Cain, S. (Purdue University)

**Collaborator**
Maltsberger, B. (University of Missouri Extension)

This project will build on a curriculum currently under development at the University of Illinois, with input from University of Missouri and Purdue University Extension. Workshop participants will include the Community or County Emergency Management Director, local elected officials, emergency responders, faith community leaders, not-for-profit leaders, civic club leaders, health and education leaders, business leaders, etc. The objectives are to help community leaders:

- Identify and understand the four phases of the disaster cycle (preparedness, response, recovery, mitigation).
- Understand the role of leadership in each phase of the disaster cycle.
- Learn a process for identifying key local leaders, both formal and informal, who should be involved in each phase of the disaster cycle.
- Develop a foundation for community partnerships and processes to plan for and manage a disaster.
2012 NCRCRD

Special

Projects
Market Maker Enhancement Project

R. Hansen (Iowa State University)

"MarketMaker's growth as a virtual network has built a community of food supply chain users that has the potential to be the "busy intersection" upon which many new applications could be launched. Until now, MarketMaker has strived to build synergistic connections that move differentiated geo specific food from farm to fork more efficiently. It has not explored the needs that could be met by integrating agricultural inputs into its value proposition to its users. Farm and food industry labor issues have bubbled to the top in recent years as a critical bottle neck to the scalability of local and regional food systems. The study conducted by Iowa State University in cooperation with Iowa Work Force Development underscored the need for a technology solution to better connect ag and food workers where there is a demand. The related Iowa based pilot project resulted in a prototype "jobs portal" on the MarketMaker platform that virtually connects MM users, Workforce Development facilitators and workers to one another. The early results have been exciting and we are already taking next steps to scale up the feature to neighboring states. We envision this portal becoming the technology bridge that will allow state based Work Force Development Groups to coordinate employment needs across state boundaries. It also has us thinking out loud about other ways that we could add value to the input side of the food supply chain." Darlene Knipe, co-founder, MarketMaker, University of Illinois

Investigating Better Alternatives for MarketMaker Database

J. S. Lee (Illinois State University)

"A major asset of the Food MarketMaker platform is the rich data contained within its data base. Over the years, that data base has grown well beyond the scale that we as creators had originally envisioned. The result is, that as MarketMaker grew in both size and scope, the data base received ad hoc adjustments to allow MarketMaker to reach the next level of expansion. The more MarketMaker grew the more challenging it became to extend the capacity of the current data base. The ability to catalog large caches of information in a way that allows the user to intuitively search and retrieve information is essential to MarketMaker's sustained growth. Data base structure is no trivial matter. Through this grant, Jong Lee conducted a critical complex analysis of the current data base structure and has been able to provide us with a blueprint for revitalizing that structure to serve our long term needs. We are in the very early stages of implementing those recommendations." Darlene Knipe, co-founder, MarketMaker, University of Illinois

Profiles Using Socio-Economic data for Economic and Community Development Decision Making

D. Otto (Iowa State University)

Accessible and up-to-date socio-economic data are important for sound community decision making in a variety of settings. Effective economic and community development projects rely on relevant and available data to assess readiness and need for projects, to analyze feasibility of possible strategies and to evaluate impacts of the efforts. This project illustrates and documents how secondary data sets produced and/or maintained by public agencies can be used to better inform community decision making for a variety of alternative economic and community development projects.
Food Systems Indicators Profiles
L. Brown, S. Deller, & A. Haines
(University of Wisconsin)

The project developed and published an online food systems profile tool using existing secondary data sources to: 1) help county based educators and community leaders better understand the local/regional food system in a systematic way in the North Central Region, 2) understand how key indicators are changing over time, 3) identify opportunities for growth or expansion in regional food systems through the use of food and agricultural industry cluster analysis.

See the portal at: foodsystems.wisc.edu
Impacts of Small Grants Completed in 2012

“The NCRCRD small grant allowed me to participate in a working team that will continue to apply for funding and work on publications.”

Mary Emery
South Dakota State University

“The NCRCRD small grant allowed me to collaborate with colleagues from 3 other institutions to develop valuable new resources for NCR horse businesses and also provide them nationwide (eXtension/horses).”

Kathy Anderson
University of Nebraska

“The NCRCRD small grant allowed me and my colleagues to conduct a systematic needs assessment regarding asset-building strategies for rural families.”

Cynthia Needles Fletcher
Iowa State University
“The NCRCRD small grant allowed me to expand use of Community Issues Management to a completely different community, build Extension staff capacity, find ways to use it in a rural area with low high speed internet connectivity, and build capacity for collaboration around the key issue of healthy food and physical activity access in a rural area.”

Dan Otto
Iowa State University

“The NCRCRD small grant allowed our team to network with others, research and develop a comprehensive and overall approach and process for heritage tourism, create a virtual place for materials and stories, and start something that can grow and evolve as a resource for professionals, communities and regions to use in their work with a broad constituency to explore and refine a broader and more encompassing and agreed upon definition of heritage tourism.”

Julie Avery
Michigan State University

“The NCRCRD small grant allowed us to gain more of a regional perspective on Latino community and business development programming. It has also helped to establish better networks across state lines associated with applied research and Extension programming. While there are indications that Latino and immigrant related CD programming appears to be growing within CRED programs, it is not universal. Extension’s role is highly variable state by state in CRED in general and how the systems are responding to this new population is still unclear (as per the finding of the poll of financial industry professionals indicating an unawareness of what Extension programming is available to assist Latino entrepreneurship).”

Tim Borich
Iowa State University

“The NCRCRD small grant allowed me to build the foundation for sustained research on poverty and related socioeconomic distress/well-being across the North Central region - through publications and grant submission.”

Linda Lobao
The Ohio State University

Borich, T., (June/July 2012) Latino focused programming was also presented as part of the exhibit of Iowa State University Community Design Extension at the Smithsonian Institute Folklife Festival, Washington, DC


Project partners Satish Joshi (PI, Michigan State University), Steve Yanni (Bay Mills Community College), Scott Loveridge (NCRCRD), and Brent Ross (Michigan State University) inspect future switch grass field test plot on the Bay Mills campus. Not pictured; Subbu Kumarappan (The Ohio State University, Wooster Campus).
The Energy Independence and Security Act of 2007 mandates use of 21 billion gallons of cellulosic and advanced biofuels by 2022, but scaling up the advanced biofuel sector poses major economic and logistical challenges for regional planners and biofuel entrepreneurs in terms of feedstock supply assurance, supply chain development, and assessment of socioeconomic impacts. A new USDA/AFRI grant involving the Center and partners at Michigan State University, Bay Mills Community College and The Ohio State University (Wooster Campus) is conducting research and developing tools to address the following issues which are also identified as program area priorities under the Sustainable Bioenergy Program:

A Survey research aimed at assessing the acceptability of biorefineries to communities and socio-economic factors associated with the level of such acceptability.

B Socioeconomic effects of these decisions including implications for small scale and minority/tribal producers.

C A biomass harvest-shed design tool to help determine the optimal mix of woody biomass, annual crops and perennial grasses for a regional biorefinery, taking into account the necessary contract terms, feedstock costs, transport costs, GHG emissions, other environmental impacts, production capacity constraints etc.

D A logistics decision support tool to help evaluate alternative feedstock supply chain configurations.

E Contract design research aimed at helping selection of appropriate governance/institutional mechanisms to coordinate supply, these may range from markets to hierarchical mechanisms such as contracts, alliances, franchising, co-operatives or vertical integration.

F A temporal dynamic agent based simulation modeling tool that can help predict the evolution of the harvest shed over time, under alternative market development scenarios.
The four regional rural development centers (RRDC) are working closely together as a team. Beginning in 2011, the four Directors decided to come together much more frequently, moving away from an annual all-staff meeting to a quarterly “directors only” meeting, focused on strategic opportunities of mutual interest. Those efforts helped each Center understand the other’s interests and strengths, and have paid off in the form of a new competitive grant jointly submitted by the four centers. The USDA/AFRI funded National Agricultural and Rural Development Policy Center relies on the RRDC national land grant network to pull together rapid policy briefs, white papers, and webinars on topics of interest to federal policy makers. The RRDCs enjoy a key partnership with Farm Foundation NFP, which has agreed to feature some of the outputs in its highly visible National Press Club forums. Relying on NCRCRD’s expertise in delivery of webinars, the NARDeP Center hosted its first webinar on “If Congress Passes it, Will Farmers Sign Up? Farmer Conservation Program Participation and the 2012 Farm Bill” in December 2012. Future scheduled outputs include impacts of natural gas extraction and policy options for rural broadband development.
The NCRCRD offered the following webinars between 9/1/11 and 8/31/12:

2. **The Business Solutions Professional Approach: Connecting Extension to Workforce and Economic Development** - M. Polzin & D. Winthrop (Michigan State University)
3. **The Economic Crisis - Is There Room for Middle Ground?** - A. Womack (University of Missouri)
4. **Community Retail Analysis Techniques: Updated Approaches in the New “Downtown Market Analysis Toolbox”** - J. Clark & G. Davis (The Ohio State University), R. Pesch & B. Schwartai (University of Minnesota), B. Ryan (University of Wisconsin)
5. **Re-Localizing our Foodshed: Models and Methodologies** - K. Draeger & D. Abazs (University of Minnesota)
6. **Ripple Effect Mapping of Extension** - L. Flage (North Dakota State University) & S. Chazdon (University of Minnesota)
7. **Challenges Facing Small and Medium Sized Entrepreneurs in Emerging Cool Climate Wine Regions** - F. Chaddad (University of Missouri), M. Gomez (Dyson School of Applied Economics and Management), R. B. Ross (Michigan State University)
8. **Studying Food System Approaches in Three Types of Rural Communities** - M. Hendrickson (University of Missouri), R. Cantrell (University of Nebraska)
10. **Promoting Science-Based Innovation Business in Agriculture and Natural Resources** - R. Griesbach & R. Wagner (USDA, Agricultural Research Service)
11. **Best Practice Approaches in the New Economy** - D. Ivan (Michigan State University)
12. **Strategies for Enhanced University-Business Linkages in the North Central Region** - M. Kilkenny
13. **Place-based Income Inequality Clusters in the Rural North Central Region, 1979-2009** - D. Peters (Iowa State University)
14. **Survey on Rural Community Wealth and Health Care Provision** - J. Pender (USDA/ERS)
15. **Proposed Changes to Child Ag Labor Regulations** - C. Layman & S. Moore (Michigan State University)
17. **The Crow Men’s Health Project: A collaborative research initiative between the Crow Indian Reservation and Montana State University** - P. Lachapelle (Montana State University)
18. **Examining Entrepreneurial Activity at Six North American Universities** - M. Kenny (University of California)
19. **Designing the New Rural Establishment Innovation Survey** - T. Wojan (USDA/ERS)
20. **Measuring Community Change** - M. Emery (South Dakota State University), M. Wall (Heartland Center for Leadership Development), T. Kelly (Annie E. Casey Ftdn), and L. Weaver (Tamarack - An Institute for Community Engagement)

The webinars are archived for free public use at: [ncrcrd.msu.edu/ncrcrd/chronological_archive](http://ncrcrd.msu.edu/ncrcrd/chronological_archive)
John Mann Joins Center

John Mann (PhD, Oklahoma State University) joined the Center in fall of 2012 as a post-doctoral fellow. Dr. Mann is providing leadership for the Center’s work in better understanding systems to improve the speed at which emerging land grant biotechnologies can be disseminated into rural areas. He is also leading a team of Extension professionals who are exploring ways to document impacts of community leadership development programs.

Fiscal Year 2012 NCRCRD Leveraging
(includes funds leveraged via small grants)

- Michigan State University Sponsorship - 32%
- USDA Core - 23%
- North Central Regional Association (NCRA) - 3%
- North Central Cooperative Extension Association (NCCEA) - 2%
- Small Grant Leveraging - 23% (faculty/staff time)
- Small Grant Leveraging - 15% (grants/fees)
- Small Grant Leveraging - 2% (cash)
North Central Land-Grant Colleges and Universities

Original 1862 Land-Grant Institutions
- Iowa State University
- Kansas State University
- Michigan State University
- North Dakota State University
- Ohio State University
- Purdue University
- South Dakota State University
- University of Illinois
- University of Minnesota
- University of Missouri
- University of Nebraska
- University of Wisconsin

1890 Historically Black Institutions
- Lincoln University

Hispanic-Serving Institutions
The center is eager to serve federally designated Hispanic-Serving Institutions (HSI) wishing to pursue rural-development activities. The HSI status depends on an enrollment threshold of 25 percent or more Hispanic students, so qualifying institutions may vary from year to year.

1994 Native American Tribally Controlled Institutions
- Bay Mills Community College, Brimley, MI
- Cankdeska Cikana Community College, Fort Totten, ND
- College of Menominee Nation, Keshena, WI
- Fond du Lac Tribal and Community College, Colquet, MN
- Fort Berthold Community College, New Town, ND
- Haskell Indian Nations University, Lawrence, KS
- Lac Courte Oreilles Ojibwa Community College, Hayward, WI
- Leech Lake Tribal College, Cass Lake, MN
- Little Priest Tribal College, Winnebago, NE
- Nebraska Indian Community College, Macy, NE
- Oglala Lakota College, Kyle, SD
- Saginaw Chippewa Tribal College, Mt Pleasant, MI
- Sinte Gleska University, Mission, SD
- Sisseton Wahpeton Community College, Agency Village, SD
- Sitting Bull College, Fort Yates, ND
- Turtle Mountain Community College, Belcourt, ND
- United Tribes Technical College, Bismarck, NC
- White Earth Tribal and Community College, Mahnomen, MN
The North Central Regional Center for Rural Development (NCRCRD) is one of four regional centers in the United States that work to improve the quality of life in rural communities. With funding from the USDA National Institute of Food and Agriculture and the land-grant universities in our 12-state region, the NCRCRD helps Extension professionals, researchers and other partners address issues that affect rural areas across the region. The center provides leadership in rural development by linking research with education and community outreach to facilitate, integrate, link and coordinate research and action for rural America.

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Mission of the North Central Regional Center for Rural Development: Strengthening the ability of the land-grant university system to execute its rural development mission.