

## Research Profile – Cheryl Wachenheim

Department: Agribusiness and Applied Economics  
Campus Location: 520 Barry Hall



### The Researcher

Cheryl Wachenheim is a professor of agribusiness and applied economics at North Dakota State University. She holds an undergraduate degree in animal sciences from the University of Minnesota, a master's and doctorate in agricultural economics, and an MBA from Michigan State University. She began her academic career at Illinois State University in Central Illinois and has been on the faculty at NDSU since 1998. Research interests focus on identifying why people make the decisions they do, and identifying how this information can help firms, organizations, policymakers, and teachers better serve their cliental. Dr. Wachenheim has been a member of the MN Army National Guard since 1998. She deployed in support of Operation Iraqi Freedom and Operation Enduring Freedom. She is currently a Medical Operations Officer for the Office of the State Surgeon in Cottage Grove, Minnesota. She is a resident of Moorhead, Minnesota, but is currently in Beijing, China on a Fulbright Scholarship.

### The Research

The primary focus of Dr. Wachenheim's current research involves understanding landowner and producer decision-making on conservation practices and participation in conservation programs.

### What do you want to accomplish in the short-term, and then, in the long-term?

My short-term objective is to identify producer conservation behaviors and attitudes, focusing on the Conservation Reserve Program. Longer term, our research will extend into investigating program options such as the Working Wetlands Program currently being piloted in North Dakota.

### Why it Matters

Farmers, ranchers, and landowners make decisions ranging from those that are simple and with short-term impacts, to those that are more complex and will affect their livelihood for many years to come. They make these decisions in an environment overly-abundant with data; in an environment heavily influenced by policy and its implementation; and under conditions of new and emerging technologies. We strive to understand this decision-making process. Doing so will help guide those in supporting industries and organizations, government and otherwise, in their efforts to develop and offer information in a form useful to these decision-makers and through a medium that will reach them.

The specific focus on decision-making on *conservation practices and programs* is particularly important for those who make, guide and implement such policies. Just as market research is invaluable to firms in deciding what products to offer and how to best market them, our current research will facilitate program design and implementation as well as efforts to make producers aware of and understand the impact of the conservation practices they employ. We are currently investigating how attributes of the Conservation Reserve Program affect the likelihood a producer will enroll in the program. These attributes include rental payment and whether it is fixed or market-responsive, contract length, government coverage of the cost of establishing required cover, and flexibility in use for grazing or

haying. We are also looking at how attributes of a Working Wetlands Program being piloted in North Dakota this year affect producer enrollment.

### **When finished, what will your work mean to the state of ND and beyond?**

Understanding how landowners and producers make decisions will help Extension and agency staff better assist them through the complexity of these decisions. It will also provide information our partners can use to help influence existing programs and develop new programs specifically suited to the needs of our producers and our residents. As conservation funds decline and producers and landowners face an increasingly complex and broad set of choices regarding land use, it becomes more imperative that programs be well targeted and well-suited to the state's agriculture.

This research also gathers information on how farmers and ranchers in North Dakota and throughout the region are impacted by rules as applied locally; and how they perceive with the rules and their application; important input for policy-makers at all levels. We can see the decisions North Dakotans make regarding the conservation practices employed on their farms and ranches. We can see their enrollment in conservation programs. Our current research will help us understand *why they make these production and enrollment decisions*. Initial results have identified the importance of different conservation program attributes to producers under their particular situations, and have identified the challenge they face when considering alternative production and land-use options.

### **Student Engagement**

Dr. Wachenheim has two graduate students who have been involved in this research. Neeraj Dhingra graduated from the Agribusiness M.S. program in May, 2016, and is currently a Ph.D. student in Transportation and Logistics. He personally completed interviews with over a dozen farmer and rancher participants, and their preferences for the Conservation Reserve Program was the subject of his thesis. He continues to work on this project, and serves as a consultant on a producer perceptions project we are conducting on the previously mentioned Working Wetlands Program. This project is the thesis topic for current M.S. student in Agribusiness, Nana Addo. She interviewed, through mail survey, participants in this program, and is currently completing her analysis aimed at understanding producer preferences for this program. What makes these concurrent projects especially interesting is that we are comparing preferences for a land-retirement program with one designed for working lands among the same population.

Another great opportunity with this research is to involve undergraduate students with an interest in investigating their aptitude for and interest in research as a career option. We have most recently worked with Molly Collette, a senior in the Department of Agribusiness and Applied Economics. She developed a coding scheme, built a spreadsheet to handle survey data, and coded and entered the responses of over three hundred farmers from the five-state Prairie Pothole Region.

### **What courses do you teach at NDSU?**

ECON 201 Principles of Microeconomics

ECON 202 Principles of Macroeconomics

AGEC 246 Introduction to Agricultural Finance

AGEC 350 Agrisales

\*\*I am currently on a Fulbright Scholarship in Beijing. I teach risk analysis to graduate students and agribusiness management to undergraduate students in the School of Agricultural Economics and Rural Development at Renmin University of China.

### **What is the greatest reward after the completion of a project?**

The beauty of our research is that we get to work directly with farmers, agribusiness firms, and organizations. Policy, Acts of God and everything in between affect the environment in which they work; continuously generating more research questions to investigate. If I ever consider a project complete, I know it is time to get back out in the field and talk to our stakeholders.

### **What is your advice for students who want to go into your field of study?**

Although the field of agribusiness includes many career choices, it is really about helping people make better decisions. It is a field where one decision can have a significant financial impact so it necessarily includes a focus on measuring and understanding how to mitigate risk. It is a field where today's students can have an important impact on the future success of firms, farms and ranches of all sizes even in the beginning stages of their careers.

### **What excites you the most about your project?**

Seeing direct application by organizations interested in the knowledge we are generating is very fulfilling.

What really makes it worthwhile is that individual farmers and ranchers recognize that they can have an important impact on the external policy environment that impacts their operation, and they are therefore willing to contribute their thoughts and ideas to help guide this environment. Every time I talk to a producer, my faith in the future of agriculture grows because I am reminded just how much ability and love for the land is present within them.

### **Contact Information**

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