



United States Department of Agriculture  
National Institute of Food and Agriculture

## PRESS RELEASE

**For Immediate Release March 5, 2013**

### **National Initiatives Gauge Farmer Perceptions of Climate Change** **Results featured in *Climatic Change Letters***

The degree to which climate change impacts the decision making of farmers has received increased attention in recent years among academic and government audiences. Results of a survey sponsored by [USDA's National Institute for Food and Agriculture](#) and coordinated by teams from the [Useful2Usable \(U2U\)](#) initiative and [Cropping Systems Coordinated Agriculture Project \(CSCAP\)](#), shed light on current farmer perceptions and provide a basis for future outreach efforts.

“Understanding how farmers think about climate change allows us and other climate projects across the country to tailor programming to meet the needs of our target audiences and account for the social barriers that stand between the information we provide and behavioral change,” said U2U Project Director, Linda Prokopy.

Participants in the 2012 survey were asked about their beliefs about the existence of climate change and its causes, their concerns about the potential impacts of climate change, and their attitudes toward adaptation and mitigation strategies. Results show that of the almost 5000 farmers who responded to the survey across an 11 state region of the Corn Belt, 66% believe that climate change is occurring, while 31% are uncertain and 3.5% do not believe it is occurring at all. Of the 66% who believe it is occurring, 8% believe it is mostly caused by humans, while 33% believe it is a combination of human and natural causes. The remaining 25% believe change is happening and is mostly due to natural causes. There is a correlation between beliefs about climate change causation and the extent to which farmers support potential adaptive and mitigative responses.

“While most farmers believe that climate change is occurring, we found that their beliefs about causation have a substantial influence on what they think about different kinds of action. Farmers who believe humans are contributing to climate change are more likely to support action to protect farmland and reduce greenhouse gas emissions. Farmers who don't see a human connection express less concern about potential impacts and are less likely to agree that action should be taken,” said J. Gordon Arbuckle Jr., Assistant Professor of Sociology at Iowa State University and member of the CSCAP project team.

Survey findings appear to confirm the project's underlying hypothesis that farmer concerns about potential impacts of climate change and support for adaptation and mitigation actions vary according to beliefs about climate change. Prokopy explains, "We are happy to be on the right track with this first test of our hypothesis. We know that we may not be able to shift underlying beliefs about climate change but understanding them helps us design outreach and education efforts focused on helping farmers become resilient to an increasingly variable climate."

Despite differences in opinion relative to climate change, additional results show a majority of farmers across the study area have positive attitudes toward *climate variability* management efforts. Two-thirds feel that farmers in general should take additional steps to account for variability, while 58% agree they should take action on their own farms. Even individuals who indicated they do not believe climate change is occurring were open to supporting variability measures for general farming and on their own land (45% and 42%). Attitudes toward government-led and farmer-level green house gas reduction strategies were somewhat less positive, with only 23% of total respondents being in favor.

A full summary of the survey data and its implications is available on the [Climatic Change Letters website](#). More information about the U2U and CSCAP initiatives is available on their websites.

###

Project Contacts:

J. Gordon Arbuckle, Jr.  
CSCAP Principle Investigator  
515-294-1497  
[arbuckle@iastate.edu](mailto:arbuckle@iastate.edu)

Linda Prokopy  
U2U Project Director  
765-496-2221  
[lprokopy@purdue.edu](mailto:lprokopy@purdue.edu)

**U2U Project Partners:** Purdue University, Iowa State University, Michigan State University, South Dakota State University, University of Illinois, University of Michigan, University of Missouri, University of Nebraska-Lincoln, University of Wisconsin, High Plains and Midwest NOAA Regional Climate Centers

**CSCAP Project Partners:** Iowa State University, Lincoln University, Michigan State University, The Ohio State University, Purdue University, South Dakota State University, University of Illinois, University of Minnesota, University of Missouri, University of Wisconsin, USDA Agricultural Research Service – Columbus, Ohio

This material is based upon work supported by the National Institute for Food and Agriculture, U.S. Department of Agriculture, under Award numbers 2011-68002-30190 and 2011-68002-30220. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the U.S. Department of Agriculture.