



2016 Farmer and Agricultural Advisor Survey Results: Perceptions and Use of Weather and Climate Information across the Corn Belt

INTRODUCTION

Useful to Usable (U2U): Transforming Climate Variability and Change Information for Cereal Crop Producers was a USDA-NIFA funded research and Extension project focused on improving the usability of climate information for agricultural production in the Midwestern United States. Beginning in 2011, a diverse team of biophysical and social scientists from nine Midwestern universities spent six years working with the agricultural community to develop climate-based decision support tools and resources to enhance farm resilience to a variable and changing climate. This fact sheet summarizes key findings from two end-of-project surveys to assess the reach and impact of the U2U project.

METHODS

In late 2016, two end-of-project assessment surveys were conducted with Midwestern farmers and agricultural advisors to measure their perceptions and attitudes about weather and climate, their awareness of the U2U project, and their use of U2U tools.

Agricultural advisors are people who provide advice (e.g. agronomic, financial, conservation) to farmers. We surveyed nearly all advisors across the 12-state U2U region, including Extension employees, Certified Crop Advisors, local conservation district employees, Technical Service Providers, and Natural Resources Conservation Service employees. We received 2,719 responses for a 25% response rate.

Farmers were randomly selected from a publicly available list of landowners who received federal assistance from the Farm Service Agency in 2013 or 2014. Surveys were sent to landowners across the entire 12-state U2U region, with oversampling occurring in the four states where the U2U project conducted most of its outreach (Illinois, Indiana, Iowa, Nebraska). We received 2,633 responses (2,166 in the four states) for a response rate of 39%. Of those who responded, 1,536 were farmers (1,224 in the four states) who completed the survey. **Results presented in this fact sheet are ONLY for the 4-state outreach region.**

U2U Project Area



RESULTS

Beliefs About Climate Change and Effect of Climate on Farming

Legend: Farmers (orange), Advisors (yellow)

Agree that "human activities are contributing to climate change"



Agree that changes in weather patterns are hurting their farm operation or the farmers they advise



Agree that there's too much uncertainty about the impacts of climate change to justify changing their agricultural practices and strategies



Agree that changing their practices to cope with increasing climate variability is important for the long term success of their farm or farmers they advise



Are willing to provide advice based on climate outlooks



RESULTS

Awareness of the U2U Project and Decision Support Tools

	Farmers	Advisors
U2U Project	6%	19%
AgClimate View	5%	14%
Corn GDD	18%	23%
Corn SplitN	16%	14%
Climate Patterns Viewer	7%	7%

74% of advisors who had used U2U tools felt the tools are moderately to very usable.

Climate Information Use in Farm Decision Making

Agree that “when farmers/advisors use tools with weather and climate information to aid decisions, it can result in better farm outcomes (related to yield, profit, and/or the environment)”

Farmers 58%

Advisors 77%

Agree they “want to meet clients’ expectations when it comes to using DSTs with climate information”

Advisors 76%

Agree that “advisors should use DSTs with weather or climate information to provide the best advice to farmers”

Advisors 72%

Are willing to use online DSTs with weather or climate information to inform their work.

Farmers 59%

Advisors 79%

Used U2U Tools in Advising/Decision Making

	Farmers*	Advisors*
AgClimate View	17%	18%
Corn GDD	32%	22%
Corn SplitN	30%	35%
Climate Patterns Viewer	20%	22%

* Of those who heard of one or more U2U tools before receiving the survey

Farmers mainly used U2U tools for making decisions related to scheduling planting/harvest, planning and scheduling fertilization, and improving yields.

Advisors mainly used U2U tools with their clients for decision making related to seed purchases, crop choice, and fertilizer application timing.

Would Recommend U2U Tools to Others

	Farmers*	Advisors*
AgClimate View	40%	75%
Corn GDD	52%	83%
Corn SplitN	56%	72%
Climate Patterns Viewer	44%	77%

52% of advisors and 44% of farmers indicated their likelihood of using weather or climate information in their advising or decision making has increased due to the U2U project tools.*

59% of farmers indicated that U2U tools are needed for informing farm decisions.

* Of those who heard of one or more U2U tools before receiving the survey

PARTNERS



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