

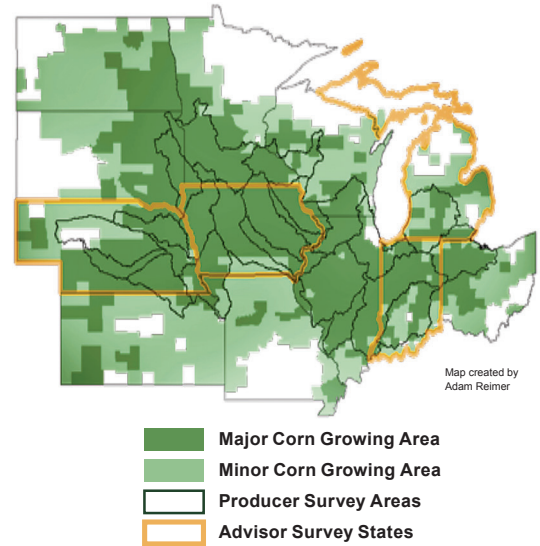


# Social Science Results to Inform Extension of U2U Decision Support Tools (DSTs)

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## Overview/Methods

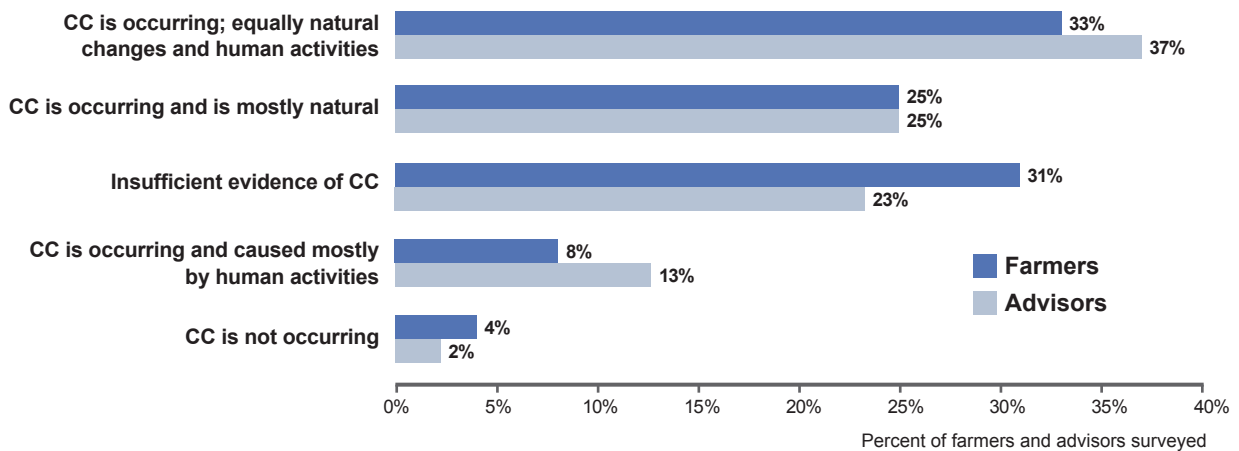
- Two large-scale surveys in Spring 2012 of corn farmers (Producer Survey\*) and variety of private and public agricultural advisors, including Extension agents (Advisor Survey)
- Responses from almost 5,000 farmers in the top 22 corn-producing watersheds across the Midwest and over 2,000 advisors in MI, IN, IA, and NE



\*Conducted in partnership with SustainableCorn.org.

## Key Findings

- Corn Producers' and Advisors' Climate change beliefs:

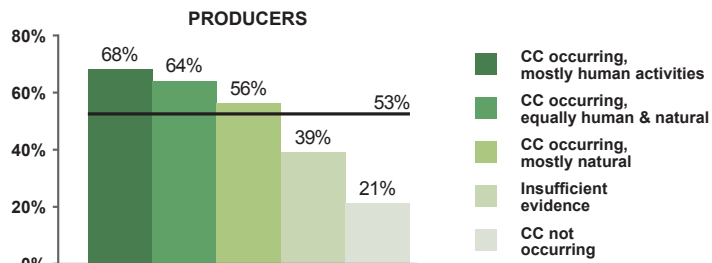


- Differences in climate change beliefs between advisor types:

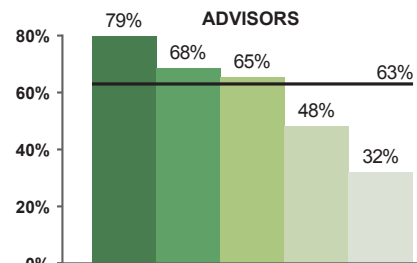
Stronger belief in anthropogenic climate change	Weaker/lower belief in anthropogenic climate change
<ul style="list-style-type: none"> <li>• State Dept. of Environment/ Natural Resources</li> <li>• Extension</li> <li>• Natural Resource Conservation Service Employees</li> </ul>	<ul style="list-style-type: none"> <li>• Ag Co-ops</li> <li>• Ag Retailers</li> <li>• Certified Crop Advisors</li> <li>• Ag Bankers</li> </ul>

(Key Findings continued on back)

- Producers' and Advisors' climate change beliefs impact their attitudes toward adapting to climate variability/change:



% of **Producers** who Agree/Strongly Agree "Changing my practices to cope with increasing climate variability is important for the long-term success of my farm." (Black line = % of all farmers)



% of **Advisors** who Agree/Strongly Agree that, "In my role as an advisor, I should help farmers prepare for the impacts of increased weather variability." (Black line = % of all advisors)

- Who do agricultural advisors trust for information about climate change?

- MOST TRUSTED:** UNIVERSITY EXTENSION AND SCIENTISTS
- MIXED** (neither trusted nor distrusted): TV WEATHER REPORTERS, STATE AND FEDERAL AGENCIES, THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)
- LEAST TRUSTED:** ONLINE SOCIAL MEDIA, MAINSTREAM NEWS MEDIA, RADIO TALK SHOW HOSTS

## Implications for Extension

- 66% of Midwestern corn farmers and 75% of advisors believe climate change is happening, but differ on the role of humans vs. natural changes
- 8% of farmers and 13% of advisors believe climate change is mostly human-caused
  - Communication needs to be tailored to a particular audience, focus on climate adaptation rather than mitigation
- Weather and climate risks are a big concern for some farmers and advisors, but for most, financial risks are more on the top of their minds
  - Important to frame adaptation strategies or risk management recommendations, such as soil conservation practices, in economic terms/profitability and soil health
  - Can also position DSTs as contributing to informed decision making that can increase resilience and profitability
- These results point to the potential for talking about adaptation, less promising for mitigation
  - Those who believe humans are contributing to climate change are more favorable towards adaptation
  - Farmers and advisors are generally open to adaptation – especially if strategies such as cover crops, no-till/reduced tillage etc. are framed as resilience to weather risks rather than "climate change adaptation"
- University Extension is highly trusted by advisors for climate change information
  - Leverage this trust to effectively communicate with farmers and advisors
  - Extension has the potential to play a key role in resilience of U.S. agriculture to climate and weather extremes

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