

# Farmers skeptical about validity of climate change

9 May 2014, by Mick Kulikowski



The recently released [National Climate Assessment](#), reported by a team of 300 experts, including a panel from the National Academy of Sciences, asserts that climate change is already impacting the United States, and that the warming of the past 50 years is "primarily due to human-induced emissions of heat-trapping gases."

Ask American farmers about climate change and who or what is causing it, though, and you're likely to get a collective shrug in response.

A recent survey in four states, led by NC State economist Roderick Rejesus, shows that farmers don't readily accept the concept of climate change or the science behind it. They also have trouble believing [crop yields](#) would suffer due to climate change.

The study polled 1,300 farmers from four agricultural states – North Carolina, Mississippi, Texas and Wisconsin – and asked them questions about climate change and its effects, as well as what they would do if climate change brought

about extreme weather in the future.

In three of the states only about a quarter of the respondents agreed or strongly agreed that climate change has been scientifically proven. North Carolina farmers were more apt to agree or strongly agree with that statement, with 36 percent affirming climate change and its scientific merit.

More farmers in each state agreed or strongly agreed that human activities are causing changes in the earth's climate, but they were outweighed by farmers who had no opinion, farmers who disagreed and farmers who strongly disagreed.

Rejesus noted that a large percentage of respondents – 21 to 31 percent – had no opinion on the questions about climate change and human influence.

"This may suggest that there are still a lot of farmers uncertain about climate change," Rejesus said. "There may still be value in disseminating scientific information about climate change to producers."

A majority of farmers agreed or strongly agreed that normal weather cycles explain most of all recent changes in climate, and that the El Nino/La Nina cycle of weather patterns is real and affects agricultural production where they live. Fewer farmers had no opinion on these two questions.

Approximately 70 percent responded that climate change would have little effect on production, predicting a 5 percent or less increase or decrease in crop yields.

In response to extreme weather caused by climate change, farmers reported that they would be likely to diversify crops, buy crop insurance, modify lease and rental agreements and even leave farming. In all states except Mississippi, farmers did not report that they would increase irrigation in response to

[extreme weather](#), while Mississippi farmers reported that they would irrigate crops more.

"Knowing that producers are likely climate change skeptics is important information to scientists and extension personnel promoting [climate change mitigation](#) and adaptation practices," Rejesus said. "It may be advisable to just not mention '[climate change](#)' when engaging [farmers](#), but rather talk about how these mitigation and adaptation practices can economically benefit their operations."

The study appears in the Journal of Agricultural and Applied Economics.

**More information:** The study, U.S. "Agricultural Producer Perceptions of Climate Change," is available online: [ageconsearch.umn.edu/bitstream.../157312/2/jaae580.pdf](http://ageconsearch.umn.edu/bitstream.../157312/2/jaae580.pdf)

Provided by North Carolina State University

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