Draft 1 for Review CTIC Statement on IPCC Land Report August 8, 2019

IPCC LAND REPORT HIGHLIGHTS IMPORTANCE OF IMPLEMENTING AND TRACKING CONSERVATION PRACTICES

By adopting conservation practices like cover crops and reduced tillage or no-till, farmers can help reduce the effects of climate change, including soil erosion, declining land productivity and desertification, according to *Climate Change and Land*, a report by the Intergovernmental Panel on Climate Change (IPCC) released today. More than 100 experts from 52 countries contributed to the report.

Mike Komp, executive director of the Conservation Technology Information Center (CTIC) in West Lafayette, Indiana, points out that the IPCC report puts farmers at the center of the worldwide strategy to keep global temperatures from rising another 2 degrees Centigrade (3.6 degrees Fahrenheit). Scientists say that, left unchecked, such an increase could result in stormier weather, more droughts, higher risks of wildfire, and declining land productivity in the decades to come.

"It's exciting and gratifying to see the IPCC report acknowledge that farmers and conservation agriculture in general are part of the solution" Komp says.

Local Conditions

"The panel also takes a very realistic look at the fact that solutions on the ground have to be developed to meet local conditions," he adds. "The report points out that, 'given the sitespecific nature of climate change impacts on food system components and wide variations in agroecosystems, adaptation and mitigation options and their barriers are linked to environmental and cultural context at regional and local levels.' That's so important to CTIC's approach to connecting farmers and ranchers with conservation systems that fit their local conditions, their operations and their economics. Environmental sustainability depends on economic sustainability, and it is great to see the IPCC acknowledge that."

Tracking Trends

Komp points out that a new project CTIC has been involved with, the Operational Tillage Information System (OpTIS), will play an integral role in helping track trends in conservation systems and even help enable farmers to earn income from sequestering carbon in their soils. OpTIS runs data from satellite images through sophisticated software to track trends in land use, including winter cover crops, no-till and reduced tillage. Results are reported on the county or USDA crop reporting district scale to protect the privacy of individual farmers.

"OpTIS data can help provide the baseline data and validation on the adoption of conservation practices, which can enable farmers to participate in markets for carbon credits and other environmental services," Komp notes. "It's a wonderful way to not only demonstrate the impacts that farmers have on the environment and help scientists model the effects of farming practices on the landscape, but also to help the broader public compensate farmers for the benefits they provide."

OpTIS was developed by Applied GeoSolutions, CTIC and The Nature Conservancy. OpTIS data for a 10-year period is available free through CTIC's website for Indiana, Iowa and Illinois;

similar data for the entire Corn Belt will be available soon. To download OpTIS data, visit www.ctic.org/OpTIS.

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New IPCC report on land use highlights the role of farmers. Perfect opportunity to use OpTIS data on cover crops and conservation tillage to track trends and help farmers find markets for their environmental services! <u>https://bit.ly/2ZeG93w</u>