



## Smart Solutions for a Changing Climate

Torrential downpours. Scorching heat waves. New pests and diseases. Longer growing seasons. Farmers in the Northeast are under increasing pressure to respond to extreme weather events, climate variability, and change. Cornell's Institute for Climate Smart Solutions (CICSS) brings together world-class researchers and highly trained extension specialists to work with producers and their communities on innovative approaches to meet this challenge.

CICSS empowers farmers to adopt practices that will increase agricultural resiliency, reduce their impact on the climate, and help them profit from new opportunities. By fostering partnerships and engaging stakeholders, CICSS delivers trusted, research-based climate information and decision-support tools for farmers, resource managers, and policy makers.

### CICSS Initiatives

#### Climate Smart Farming

Through CICSS's new Climate Smart Farming program, farmers gain direct access to a suite of tools, best management practices, information forums and specialists. These resources help farms build resilience in the face of extreme weather events while reducing greenhouse gas emissions. The Climate Smart Farming tools, practices, and specialists encourage wider adoption of climate change adaptation and mitigation practices to sustainably increase farm productivity and incomes.



#### Climate Smart Farming Extension Team

CICSS has established the first Climate Smart Farming (CSF) Extension Team in the nation. Spanning New York State, the CSF team provides climate information related to economic development, dairy, grapes, small fruits, vegetables, integrated pest management, field crops, and soil health issues - answering farmers' questions about climate variability and farm management. This innovative approach to extension programming can serve as a model for climate change extension efforts nationwide.

## Cutting-Edge Research

Cornell University is one of the world's leading institutions for climate change research - including climate models and seasonal forecasts, greenhouse gas mitigation, crop varieties, agricultural and land use adaptations, water resource management, economic risk assessment, and stakeholder engagement. Cornell researchers, from nearly every department in the College of Agriculture and Life Sciences, are committed to translating their research into practical applications to address this critical issue.



## Information Clearinghouse

CICSS provides a clearinghouse for information on climate change impacts and responses for agriculture in the Northeast. CICSS's *Climate Smart Farming Videos* showcase farmers' management responses to extreme weather and change. *The Toolkit of Management Practices* gives farmers the information they need now to respond. And the *Farmer Forum* encourages farmer-to-farmer networking, information exchange, and access to specialists.

## Online Decision Support Tools

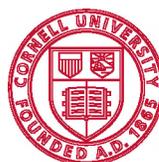
Because of increased climate variability and change, it's becoming more difficult for farmers to make accurate decisions simply based on the historical weather. Growers in the Northeast will benefit from new decision support tools that use weather, climate, agricultural, yield, and economic data to help them make the most informed decisions in the face of a changing climate. These tools are being built with farmer input and will be available on multiple platforms when and where farmers need them.



## Partnerships & Policy Guidance

CICSS regularly provides briefings for government officials on climate change issues, delivering the latest research updates and guidance on policies that will support stakeholders' ability to adopt new practices. CICSS also builds partnerships between the Cooperative Extension system, agricultural associations, government agencies, and the USDA's Northeast Regional Climate Hub.

CICSS's research and outreach work is made possible through funding from various sources, including USDA NIFA Federal Capacity Funds (Hatch and Smith Lever), the USDA NE Climate Hub (ARS), and the New World Foundation. For more information, visit us at Rice Hall, Cornell University, Ithaca, NY 14853, call 607-254-8808, or see: <http://climateinstitute.cals.cornell.edu/>.



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