

ADDRESSING CLIMATE CHANGE

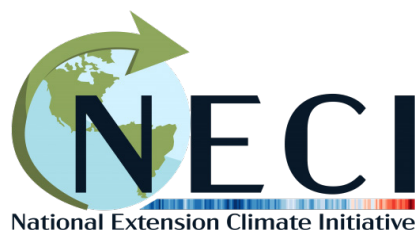
From regenerative agriculture to renewable energy production, rural America is poised to play a significant role in carrying out the new administration's plans to address climate change. The RRDCs are uniquely positioned to connect and support a rural climate movement and have a long history of partnering with the Cooperative Extension System to support resilience in rural communities. Efforts already underway include:



www.rrdc.info

National Extension Climate Initiative

With support from the RRDC in the West, this group of more than 100 land-grant university faculty and staff is spearheading multi-state collaboration on climate-related research and extension efforts, and is addressing the need for climate crisis educational materials in the national Extension system.



Food System Adaptation to Climate Change

The RRDC in the Northeast conducts climate-change research primarily from the perspective of how agriculture and food systems can adapt to a changing climate. For example, our NIFA-funded research project, Enhancing Food Security in the Northeast (2011-2018), modeled climate change effects on the productivity of several crops, quantified the region's land requirements to produce complete diets under different diet scenarios, and estimated how crop output would change if new land is brought into production.

Cloud Seeding to Mitigate Hail Damage

The RRDC in the North Central region has been working on evaluating the effectiveness of weather modification as a crop hail damage reduction agent. Their research evaluates whether cloud seeding in the summer reduces hail damage to small grain crops (wheat, barley, and oats). Results suggest that counties that participate in the cloud seeding program experience improved small grain crop yields due to reduced crop losses with an estimated benefit-cost ratio of approximately 20:1. As concerns regarding the changing climate and prevalence of extreme weather continue to grow, this research offers a useful evaluation of a potentially effective adaptation mitigating with crop loss due to hail.

National Sustainability Summit & National Extension Energy Summit

The RRDCs provide planning support to this biennial convening of educators, practitioners, and researchers to exchange sustainability and energy research, innovative programming strategies and educational tools, and to cultivate new communities of practice that expand and strengthen collective impacts around climate/air, land, food, water, and energy. One outgrowth of this project is the development of the National Extension Climate Initiative.

<https://www.nationalextensionsummits.com/>



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