



Current Activities and Future Priorities of the Northeast U.S. to Address Climate Impacts in Agriculture

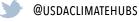
BY PENNSYLVANIA STATE UNIVERSITY AND CORNELL UNIVERSITY | AUGUST 2016



**PURPOSE** To determine the current and future research and Extension capacity of land-grant universities (LGUs) in the Northeast U.S. relative to the agriculture, natural resources, and forestry sectors.

**METHODOLOGY & DEMOGRAPHICS** | The population consisted of all Extension professionals, faculty, and scientists from the 16 land grant universities in 12 Northeastern states in the Colleges of Agriculture (N=3,757). An online survey was conducted using Qualtrics, which was reviewed by a panel of experts, and pilot tested in the Southern Region of the U.S. The response rates were as follows: 1,211 participants responded out of 3,757 (32.2%). Where 554 of 1,211 (45.7%) dedicated at least 1% of their time to climate change activities. 494 (of 554) respondents answered this segment of the survey.





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TOP 6 MITIGATION ACTIVITIES (N=554)	Research	Farm Management <b>29.2%</b> , Socioeconomic <b>20.4%</b> , Energy <b>17.3%</b> , Greenhouse Gas <b>17%</b> , Policy and Planning <b>15.9%</b> , Forestry <b>9.9%</b>
	Extension	Socioeconomic <b>37.5%</b> , Farm Management <b>29.8%</b> , Policy and Planning <b>17.5%</b> , Energy <b>16.2%</b> , Forestry <b>11.7%</b> , Greenhouse Gas <b>11.4%</b>
TOP 6 IMPACT ACTIVITIES (N=554)	Research	Ecosystem <b>48.2%</b> , Weather <b>37.4%</b> , Agriculture <b>30.9%</b> , Aquatic and Sea <b>17.7%</b> , Socioeconomic <b>17.3%</b> , Forest <b>13.2%</b>
	Extension	Ecosystem <b>42.8%</b> , Weather <b>35.2%</b> , Agriculture <b>30.3%</b> , Socioeconomic <b>19.5%</b> , Aquatic and Sea <b>13.5%</b> , Forest <b>13.4%</b>
TOP 6 ADAPTATION ACTIVITIES (N=554)	Research	Resource & Land Management <b>41.3%</b> , Crops <b>18.6%</b> , Planning <b>18.6%</b> , IPM <b>13%</b> , Socioeconomic <b>12.5%</b> , Policy <b>9%</b>
	Extension	Resource and Land Management <b>42.8%</b> , Planning <b>22.4%</b> , IPM <b>20.4%</b> , Crops <b>20%</b> , Socioeconomic <b>15.9%</b> , Policy <b>12.5%</b>

**CONCLUSIONS AND FUTURE PRIORITIES** Findings from this study provide insight into the current activities and future priorities that land-grant university research and Extension personnel in the Northeast are conducting to address climate impacts in agriculture. The respondents of this study represented research faculty, Extension specialists, and Extension educators from the 16 land-grant universities in the Northeastern U.S.

- 1 The top climate change focus areas found were: natural resources, cropping systems, social sciences, plants, and the environment.
- 2 Training Extension educators, developing decision-support tools, and conducting costs-benefit analysis are the top future climate change activities respondents are willing to participate in.
- 3 For future priorities, respondents are most interested in collaborating on regional research and programming initiatives, attending workshops and conferences, and developing and implementing educational programs.

**ABOUT USDA NORTHEAST CLIMATE HUB** Our mission is to develop and deliver science-based knowledge and practical information for land managers and farmers to support their decision making related to climate impacts. We work in partnership with local, state, and federal governments, land grant institutions consultants, and private organizations reaching across twelve states from Maine to West Virginia and the District of Columbia.

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