Adapting to a changing climate will require specialized outreach resources for farmers to ensure continued farmer viability. Understanding what and how farmers think about climate change could lead to developing resources more specifically targeted to their needs.

New England is expected to experience increasing weather variability throughout this century. Changes in growing season length, new pests and invasive species, and increased drought risks are just some of the expected agricultural impacts of climate change, prompting many farmers to consider adopting climate adaptation practices. New England also has a high proportion of new farmers who seek credible information on how to best manage their farm under a wide range of conditions. Mental model maps – visual representations of how a person thinks about the world around them – can be used to understand farmers’ perceptions of how climate change influences a farm system. These models can be used to identify areas where farmers may need climate outreach resources. We will conduct mental model interviews and focus groups with farmers to identify needed outreach efforts and the specific types of educational resources that farmers find the most useful. There is also currently a lack of climate adaptation resources that are targeted to farmers based on their scale and experience, yet most farmers in New England own small to medium operations, and a growing number have been farming for less than 10 years. Our project aims to develop climate resilience tools and resources specifically addressing the needs of small, medium, and beginning farms in New England.

Figure 1: Example of how a farmer might begin depicting their mental model of a farming system. Arrows connecting components show how a change in one component would lead to a perceived change in another (e.g. increasing Yields leads to an increase in Farm Profit).