

# Leveraging Cooperative Extension for Climate Resilience Challenges and Opportunities in Agricultural Communities

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## What is Extension?

- All **land-grant universities** have a community-based education partnership called Cooperative Extension.
- Extension has a long history of providing **education and assistance** on agricultural, environmental, and community development problems.
- As a **“boundary organization,”** Extension mediates, communicates, convenes, and translates at the boundary between science and society<sup>1</sup>.

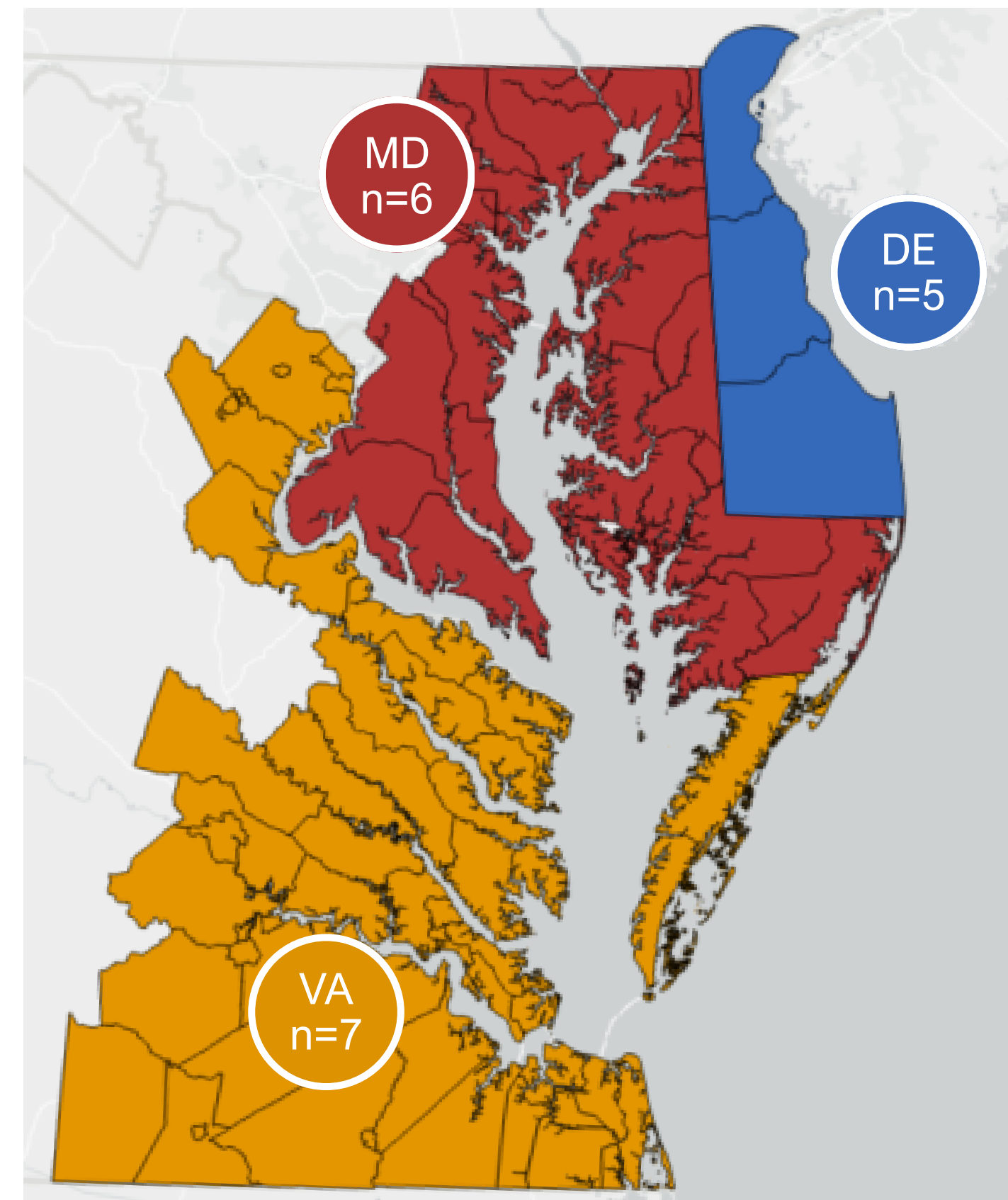


## Introduction

Agricultural communities have unique strengths and challenges in responding to extreme weather, sea level rise, and other hazards.

Groups like the Extension Disaster Education Network have long advocated that **Extension is well-situated to play a key role** in disaster<sup>2</sup> and climate<sup>3</sup> resilience in these communities.

This project aims to understand the capacity of Extension to build climate resilience in coastal agricultural communities.



Project area and number of participants per state

**How does Extension incorporate resilience into agricultural programming, and what factors enable or constrain this work?**

## Methods

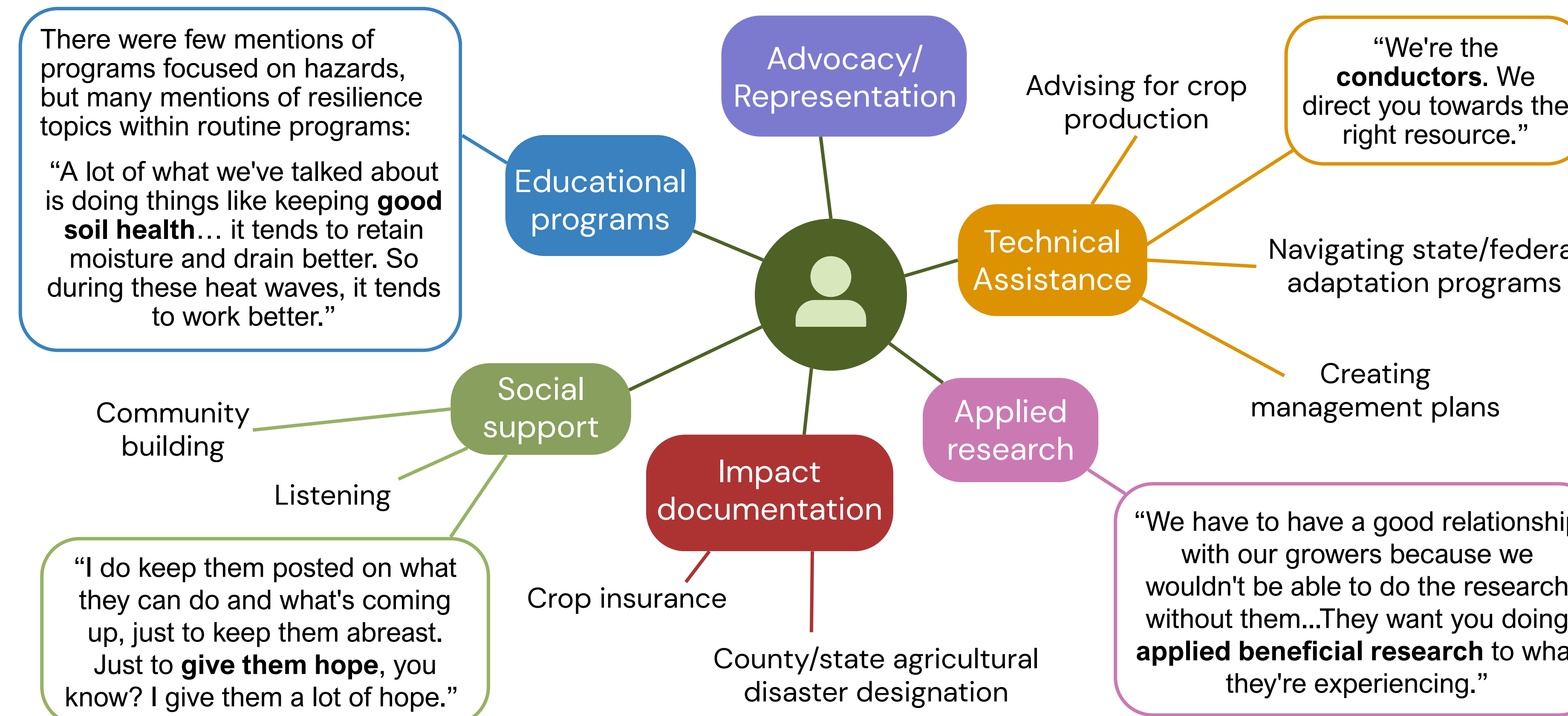
- We conducted semi-structured interviews with 18 field-based agricultural agents and specialists from the 6 land-grant universities in DE, MD, and VA
- Data were analyzed thematically.

## Results

### Priority hazards & concerns



### Current roles & strengths



## Conclusion

- Despite various challenges, Extension professionals are already key actors in building resilience, especially through *one-on-one technical assistance*.
- Results indicate that there is room to formalize and expand this work into more robust programming.
- To expand their capacity, agents need institutional support and greater knowledge of practical adaptation options.



## Applications

This work is part of the **Community Agricultural Resilience through Extension (CARE)** project. Findings will inform CARE's development of resilience tools and training for Extension.

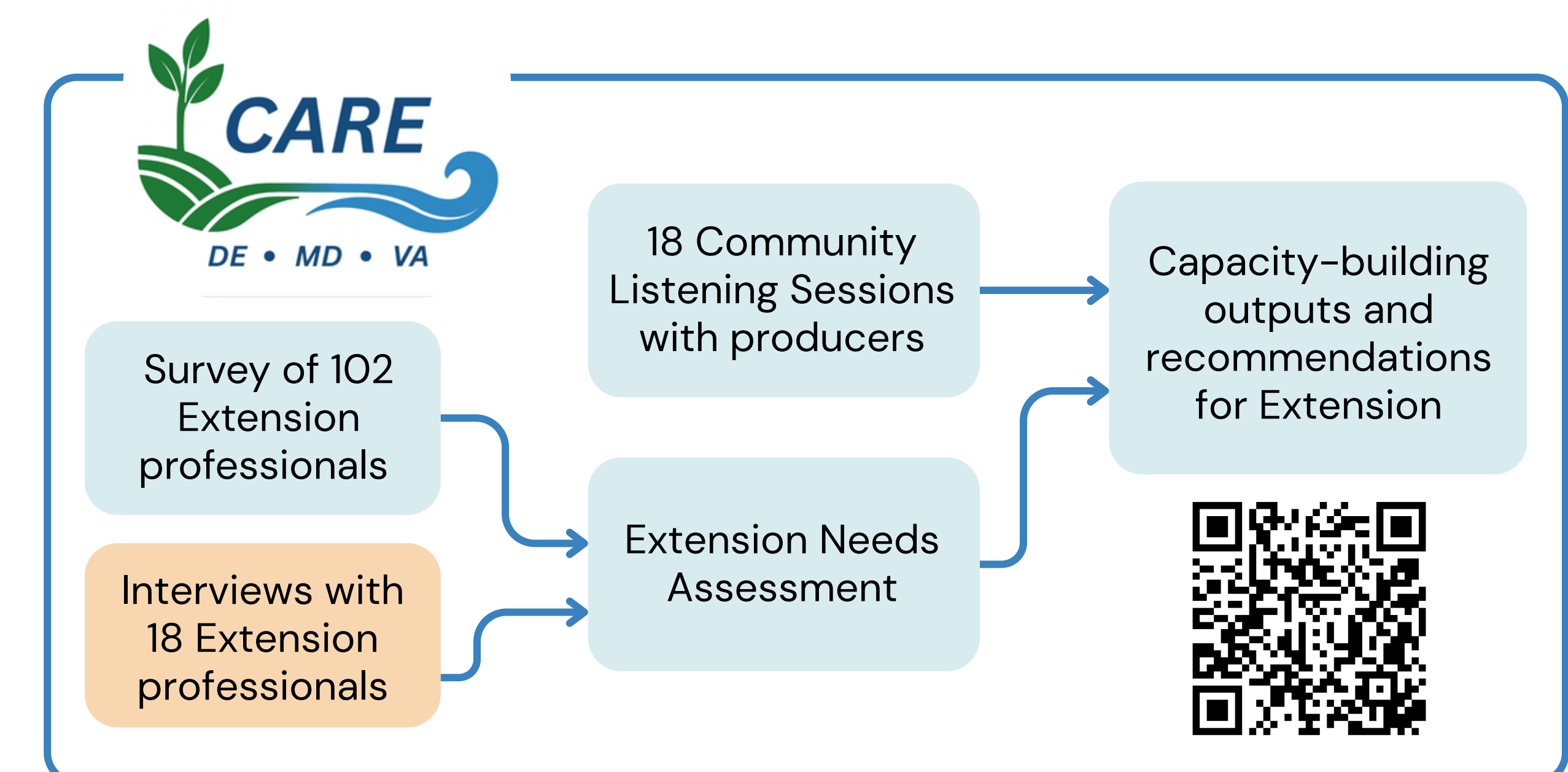
**Resilience and disaster practitioners and researchers** may find Extension to be valuable partners in engaging agricultural stakeholders. Beyond providing farmer contacts, Extension can help projects navigate challenges from design to delivery.

## Challenges

- Knowledge gaps** among agents, especially around adaptations, funding programs, and tools
  - “There's no way as a human that we can possibly know the answer to every question that walks through our door”
- Gaps in applied research**
- Impracticality or high expense of proposed adaptations**
  - “I do push some of the researchers to stay practical. If they're starting to push, like, quinoa grows great. Well, there's no market for quinoa here.”
- Building relationships and trust**
  - “It's kind of how you have a conversation with them and being sensitive to the fact that this piece of land is really important to them. Sometimes certain people will say the wrong types of things.”

## Opportunities

- Training for Extension** on resilience
- Tools & materials**
  - “It would be certainly helpful for Extension agents to know where do I go to look for this type of information, because right now it's kind of just scattered around.”
- Increased regional connections**
  - “The number of those folks doing that applied work is actually shrinking. And so that's why it becomes even more important that we know each other”
- Areas for greater organizational focus** included:
  - Adaptations to coastal and climate hazards, including new technologies
  - Mental health and stress support
  - Disaster preparedness
  - Community building



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## References

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