There are unique factors faced by migrant communities in Eastern NC that make them more vulnerable in the context of disasters compared to other communities (Gill, 2020).

Structural Barriers

Migrant specific factors:
- Rural areas and access to healthcare centers (Ramos, 2016)
- Bars specific to farm work
- Average farmer in NC earns only $11,000 per year (Gill, 2020)
- Occupational hazards

Eastern NC specific factors:
- Worldwide, flooding is most frequent and devastating form of extreme weather (Foll, 2021)
- Continuous damage from recent storms (e.g., hurricanes Matthew, Michael, Florence etc.)
- Flooding in NC extends far inland (Doll, 2021)

COVID Pandemic
- As of July 6, 2020, North Carolinians with Latin American ancestry made up 40% of COVID-19 cases in the state, despite only comprising 10% of the population (Gill, 2020).

Climate Change and Habitat Destruction
- Greenhouse gases, rising temperatures and sea levels have led to more frequent and intense extreme weather (Patz & Hahn, 2012)
- Habitat destruction has increased contact with animals, therefore increasing the spread of zoonotic disease (Pokharel et al., 2021)

Methodology

Sample
Recruitment was done via connections from ENLN Migration Project; thus, a convenience sample was used. Participants were employees from various organizations offering direct services to farmworkers in Eastern NC and consisted of the following (N = 5):
- Department of Health and Human Services Farmworker Health Project (n = 1)
- AMERICAN (n = 1)
- Episcopal Farmworker Ministry (n = 1)

Data Collection and Procedure
Qualitative data were collected using an oral history format via semi-structured interviews lasting 45-70 minutes. Questions consisted of:
- Demographic questions: For example: “Where are you from, and can you tell me a bit about that area?”
- Baseline biographical information: experience with extreme weather, experience with COVID, tyng these experiences together

Data Analysis
Nvivo Software was used to analyze the qualitative data collected
Coding segments were developed based on content to analyze patterns within and between interviews

All interviewees completed the informed consent protocol both verbally before their interviews and by electronically signing the protocol before their interviews and by electronically signing the protocol.

Results

Topics Discussed Based on Frequency

Most frequently discussed topic: COVID (96 instances)

Other frequently discussed topics:
- Collaboration (87 instances)
- Organizational planning and management (61 instances)
- Most frequently-discussed stressor related to farm work: Occupational hazards, including agricultural exploitation

More discussion of responses to disaster than difficulties posed by disaster

“...and then, the advocacy piece is also really important because we’ve met with the governor’s office, we’ve met with DHHS [Department of Health and Human Services], we’ve met with the Department of Agriculture, et cetera, et cetera. People in the community are having access to these government representatives to really speak about what’s going on in ways that nobody else could...”

- Lanza Garzón, Episcopal Farmworker Ministry

Future Directions & Implications

Recommendations for Research
- Include perspectives of migrant farmworkers
- Include a larger variety of organizations
- Conduct a post-COVID study (Remember – this study took place during a disaster)
- Include perspectives of other partners in collaboration (i.e., state government, community partners, NC Agricultural Extension, etc.)
- More research in general is needed

Recommendations based on NeedsExpressed by Interviewees
- Communication
  - More disaster resources in Spanish
  - Increased access to technology (Internet, power, cell service)
  - This will require increased collaboration with the government, particularly state and county governments who are often responsible for disseminating disaster-related alerts and information.
  - Increased Staff Capacity
  - Importance of outreach workers
  - Compensation and numbers
  - Full-time positions
  - This will require increased federal funding.

Recommendations for Governmental & Organizational Policy
- Disasters are likely to increase in frequency & intensity. Planning is key.
- Many interviewees drew connections between hurricanes and COVID.
- Those that had plans in place were more prepared when the pandemic began, and many interviewees will use their responses to COVID to shape their responses to future hurricanes.
- Community participation
  - Feedback and evaluation
  - Ensure that responses, programs, and resources are linguistically, culturally, and occupationally relevant to farm workers
- Revisit policies related to agricultural exceptionalism and workplace exploitation
  - Historically, to avoid granting worker rights to predominantly African American sectors, farmworkers were deemed exempt from the National Labor Relations Act of 1935, which established basic labor protections for workers (Farmworker Justice, 2021)
  - Agricultural exceptionalism leads directly to occupational hazards and exploitation in farmwork
  - Farmworker vulnerability is heightened during disasters, including COVID and extreme weather.

References

With climate change impacting the frequency, intensity, and scope of disasters, individuals and communities worldwide are experiencing a stark increase in disasters that transcend borders. Eastern North Carolina (NC) is in the midst of recovery from simultaneous disasters: extreme weather and the COVID pandemic. The magnitude of the effects of disasters is catastrophic, yet the burden is not evenly distributed. The effects of these disasters are greater for migrant farmworkers, a population often in the “shadows” of society who face extensive structural vulnerabilities.