

Puerto Rican Farmer Households' Food Security After Hurricane Maria: Rethinking Metrics

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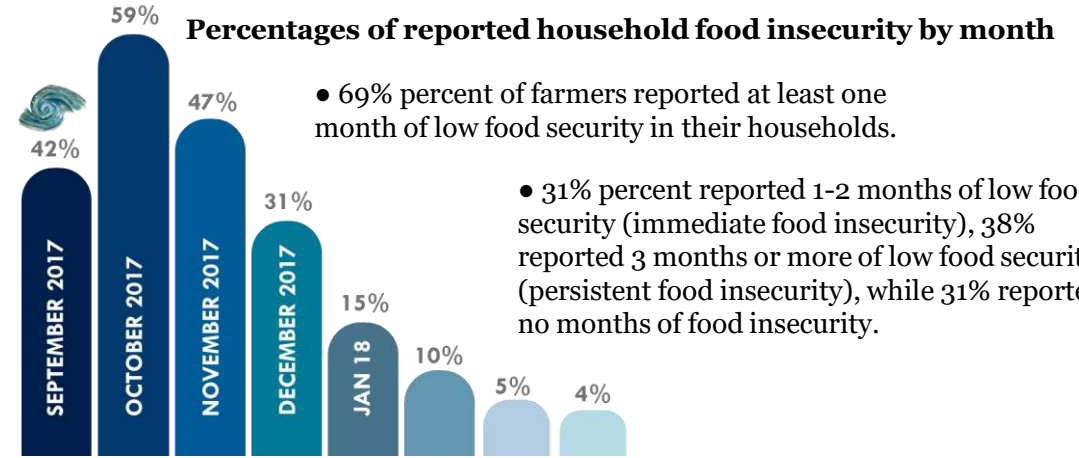
Islands are uniquely vulnerable to extreme weather events and food insecurity and have additional response challenges.

Farmers have a key role in producing domestic food, which can safeguard food security when food importation may be challenging. Nevertheless, in the context of disaster, farmers themselves may be vulnerable to food insecurity.

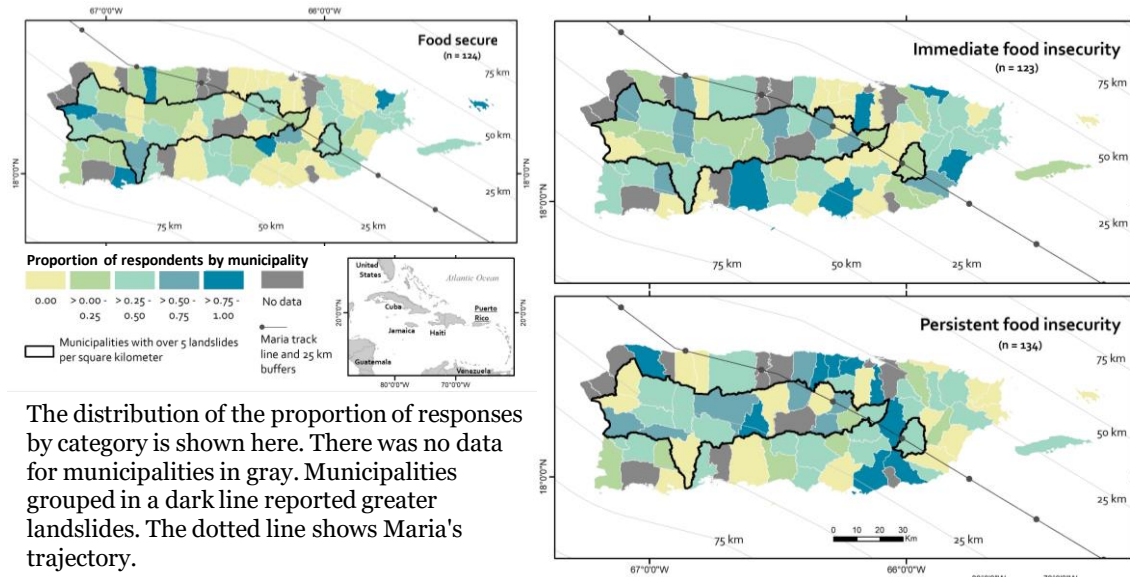


- Survey data of 405 farmers (87% response rate), coupled with biophysical data related to the hurricane were examined under a social-ecological lens.

- Farmers were asked between May and June 2018 about the months in which their households had difficulty acquiring food or experienced shortages.



Strengthening farmers' adaptive capacity could safeguard their livelihoods, and thus support local agricultural production and food security. Understanding how people navigate disruptions in the built and natural environment is crucial for better understanding food security outcomes in the context of disasters. Future studies should incorporate mixed-methods and integrate structural variables for a more nuanced understanding.




- A multinomial regression model suggested that biophysical impacts, but especially social factors, such as age and restricted access to external sources of support, were linked to reporting persistent food insecurity.

- Those in the persistent category tended to reside in municipalities with greater incidence of landslides and that were close to the hurricane's track. The size of farms of those experiencing persistent food insecurity tended to be smaller than the farm size of people experiencing only immediate or no food insecurity.

- Results suggests that the biophysical impacts of the hurricane interact with existing infrastructure and social resources to affect farmer vulnerability and the food environment in different ways.

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