An Assessment of Agriculture, Forestry, and Rural Communities in the U.S. Caribbean after Hurricanes Irma and Maria

FARMER/LAND OWNER INTERVIEW GUIDE

Interview Background and Objectives (read to participants by interviewer)

This interview is part of a larger study aimed at understanding people's experiences with Hurricane(s) Irma/Maria and the associated effects on individuals, farms, forests, and rural communities in Puerto Rico and the U.S. Virgin Islands.

In this interview, we'd like to talk with you about four major topics: (1) the effects or impacts of the hurricane(s) on your land, farm/forest, and your livelihood, (2) any preparations or preventative actions you may have made prior to its/their landfall, (3) how you coped with and what you did immediately after the hurricane(s), and (4) what the recovery process has been like over the past year and your plans for the future. Altogether, this should take about 90 minutes.

Interview Standards (read to participants by interviewer)

The information collected from you today and in any future interactions will be kept confidential. With your permission, we will use this audio recorder to help ensure the accuracy of captured information. The recording is strictly for research purposes and will not be used beyond the research team. We will transcribe the recording and use a coding system to keep your identity separate from your responses and all information that you provide. Your name or any other specific identifying information will not be used in the presentation or publication of results.

Your participation in this interview is completely voluntary. You may decline to participate or withdraw at any time. If you choose to withdraw from the study, any data collected will be returned to you or destroyed at your request.

Interviewee Code:	Date:
Interviewer(s):	Location:

I. LAND AND FARM CHARACTERISTICS

To get started, I/we'd like to ask you about your land and/or your farm/forest.

- 1. Can you give us a basic description of your land and/or farm, as it was before the hurricane(s) (probe/prompt/listen for):
 - a. total area (ac/cuerdas); area by major crop; area for livestock grazing and number/head of livestock by type; area of forest/wooded land
 - b. type of ownership (individual; joint; family partnership; corporate; etc.)
 - c. is home on or within a mile of land/farm?
 - d. USDA, PR/USVI Dept. of Ag. or other program participation

II. HURRICANE EFFECTS

Now, we'd like to learn about the effects or impacts of the hurricane(s) your land, farm/forest, and business/livelihood:

- 2. Can you tell us about the most significant effects of the hurricane(s) on your farm and/or forest/wooded land? (If the respondent is unsure about how to answer or what to focus on in his/her answer, use one or more of the following to probe/prompt/listen for:)
 - a. Area/percent of farmland (by major crops) damaged by/lost to the hurricane(s)? Estimated economic cost associated with these losses?
 - b. Number/percent of livestock lost to or injured by the hurricane(s)? Estimated economic cost associated with these losses?
 - c. Area/percent of forest/wooded land affected by the hurricane(s)? Estimated economic cost associated with these losses?
 - d. Structural damages to infrastructure(s)? Estimated economic cost.
 - e. Indirect effects (e.g., product prices, services, transportation, inputs (gas, feed, fertilizer) prices, etc)

II. HURRICANE PREPAREDNESS

Now, I/we'd like to ask you about any preventative actions or preparations you may have taken prior to the hurricane(s) to reduce expected impacts and how prepared or unprepared you felt you were for it/them.

- 3. Can you briefly tell me/us what you did in the 3-5 days prior to landfall to prepare your land, farm, business, etc. for the hurricane(s)?
 - a. On a scale of 1 (not at all effective) to 5 (extremely effective), how effective were these preparations/ preventative actions?
 - b. Was there any specific information that influenced your decisions to take these actions?

 If yes, what was it? Where did you get it from?
 - c. Is there any other information or other resource that you wish you would have had to better prepare for the hurricane(s)?
- 4. If there was one preventative action or preparation you wish you would have taken before the hurricane(s), what it would have been?
- 5. Have you taken any longer term (i.e., in the months-years prior to Hurricane Irma/Maria) measures to decrease the risk and/or vulnerability of your land, farm, business, or livelihood to tropical storms or hurricanes? If yes:
 - a. Can you briefly tell us what you did and how effective (1 (not at all) 5 (extremely)) it was/they were in preventing negative impacts from Irma/Maria?
 - b. Was there any specific information or program that influenced your decisions to take these measures? If yes, what was it? Where did you get it from?
 - c. Is there any other information or other resource that you wish you would have had to help you prepare in the longer term for this/these hurricane(s)?

III. COPING, RESPONSE, AND RECOVERY

Now, I/we'd like to talk with you about what you did to cope with or respond to the hurricane(s) during and immediately after it/they passed over the island.

6. Were you on/within a few miles of your farm/forest when the hurricane(s) made landfall? If not, how soon were you able to get there after the hurricane(s) had passed?

- 7. In the first few days to weeks after Hurricane(s) Irma/Maria, what did you do to respond to or cope with the effects of the hurricane(s) on your land, farm, business, livelihood?
 - a. What were your primary sources of feed, water, energy?
 - b. Did you harvest any/all of undamaged agricultural products growing on your land? If yes, what crops?; what percentage?; for self consumption/for sale?
 - c. Did you or anyone in your household collect/consume wild plants/mushrooms following the hurricane(s)? If yes: what was collected? Where was it/were they collected from? Were any of these for medicinal purposes? If yes: for what conditions? Is this a regular practice or new since the hurricane(s)?
 - d. What was the most challenging issue/aspect for you to cope with or respond to in the first few days to weeks after the hurricane(s) passed?
- 8. What assistance or information, if any, have you received so far to respond to or recover from the hurricane(s)? (probe/prompt/listen for key USDA and Puerto Rico Dept. of Ag programs)
 - a. What specifically did the assistance address? How satisfied (1: not at all 5: extremely satisfied) are you with it/each? When did it/each occur? From whom did it/each come?
 - b. What, if any, has been the most effective assistance/support you have received following the hurricanes? Can you tell us briefly about this (probe/prompt/listen for: crops, livestock, etc.; source (including social networks and ties, such as cooperatives or community groups), delivery method, etc.)?
- 9. In the year or so since the 2017 hurricanes, what has been the most challenging thing for you to respond to or recover from in terms of your land, farm, business, or livelihood?
- 10. What assistance/support for your land, farm, business, and/or livelihood have you received in the year since the hurricanes?
 - a. What specifically has the assistance addressed? When did it occur? From whom did it come?
 - b. How satisfied or dissatisfied are you with this assistance?
 - c. What, if any, has been the most effective assistance/support you have received since the hurricanes? Can you tell us briefly about that?

d. Now, could you please take a few minutes to fill out this sheet of paper in front you. (Provide table listing USDA programs with columns to indicate level of interaction with programs and assessment of their effectiveness in your preparedness, response or recovery associated with the 2017 hurricanes.)

IV. MID-LONG TERM PLANS FOR COMMUNITIES, AGRICULTURE, AND FORESTS

Finally, I/we'd like to ask you a few questions about your plans for the future...

- 11. What are your plans for your land, farm, and business over the three to five years?
- 12. (If landowner): How likely are you to sell or give all /any of your land away in the next year? Or, in the next three to five years?
- 13. Have your plans for the future changed because of the hurricane(s)? If yes, how so?

V. IF THERE IS EXTRA TIME

14. Let's pretend for a moment that this pen in front of you is now a magic wand and you can use it to write down the one or two things that you think would make this island's farms, forests, and rural communities most resilient to future storms, what would it be?

VI. CLOSING

This brings us to the end of the interview. Do you have any additional comments or questions for me/us? Thank you for your time and contribution! If you would like a copy of the final report or other related products, please provide your address (email/physical) and we will be sure it gets to you.

Burden Statement for Forms - Information Collection Requests

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