

AMA RURAL EMERGENCY PLAN

Apoyo Mutuo Agrícola



AMA Rural Emergency Plan

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Plan Version 1: 05/01/2024

This work was produced by undergraduate students in the Worcester Polytechnic Institute (WPI) Global Projects Program. For more information about this project and the WPI Puerto Rico Project Center: <https://wp.wpi.edu/puertorico/projects/mar-apr-2024/ama/>

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Acknowledgments

We would like to thank and acknowledge everyone who contributed to our project. Our project would not be possible without the hard work and dedication of our sponsors, Jessica Santos and Martín Cobian, founders of Apoyo Mutuo Agrícola; our faculty advisors, Dr. Grant Burrier and Dr. Scott Jiusto; and all of the organizations and farmers we collaborated with. We would like to show our appreciation for all members of Paseo 13, Rosa Millie Cortes Quijano from Sierra Club, Bruje from Somos Espejos, Alana Feldman Soler from Centro Paz Para Ti, Monica Ponce from CAUCE, Omar Cuadrado from Fideicomiso, Augusto from Finca el Timón, Grisa from Finca el Vapor, Lester McGrath, and Miguel Santiago.

About This Document

The “AMA Rural Emergency Plan” is a chronologically ordered emergency plan created for Apoyo Mutuo Agrícola (AMA) by students at Worcester Polytechnic Institute as part of a project titled Harmonizing Holistic Health and Disaster Relief in Puerto Rico. This emergency plan is intended for use in rural communities, specifically Lares, as this location is at the forefront of AMA’s emergency relief efforts; however, it can serve as a model for future emergency plans in other communities. This document was produced in a collaboration between Apoyo Mutuo Agrícola and the Worcester Polytechnic Institute Puerto Rico Project Center (WPI PRPC). This document is intended for the AMA team to use as a starting point for their emergency plan. AMA is allowed to update and change this document at any time. AMA can use this as their main document for emergency planning and distribute this internally and externally. This document can be distributed externally to community members living in rural locations so individuals can be knowledgeable of AMA’s resources and tools during times of emergency. This will provide easy access for community members to utilize the tools and forms provided.

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1.0 Overview

This document contains the Emergency Plan for Rural community members and farmers developed by Apoyo Mutuo Agrícola (AMA). The document is sectioned into Preparedness, Emergency Declared, During Emergency, Days After an Emergency, and Weeks After an Emergency as outlined in the AMA Emergency Plan Storyboard (Fig. 1). In each section, you will find detailed descriptions of the tools and actions outlined by the Storyboard.

2.0 Emergency Storyboard

AMA’s Rural Emergency Plan Storyboard, as seen in Figure 1, is an overview of the rural emergency plan which includes links to resources and forms.

Rural Emergency Plan Storyboard: [AMA Storyboarding Rural Emergency Plan](#)

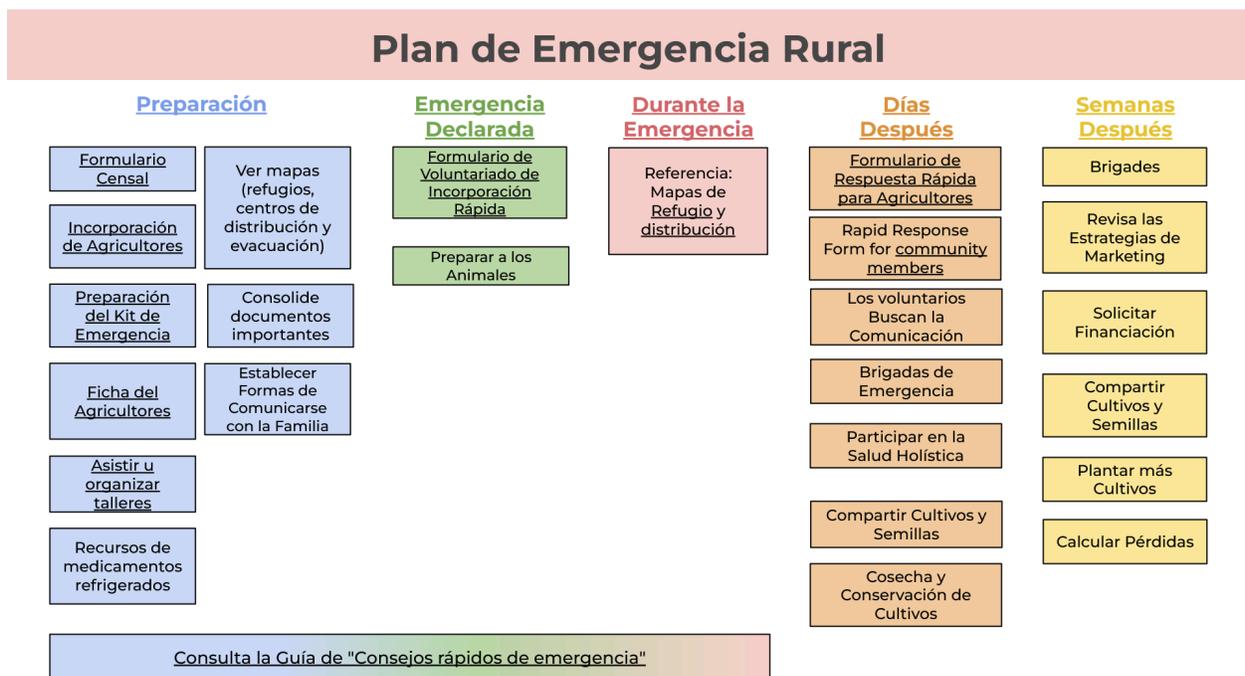


Figure 1: Storyboard of AMA’s Rural Emergency Plan

3.0 Preparedness

3.1 Reference ‘Emergency Quick Tips’ Guide

Refer to the ‘Emergency Quick Tips’ guide for important information to know before an emergency occurs. This guide includes tips and QR codes to learn more about the following topics:

- Best communication practices
- Nearby medical assistance
- Local distribution centers
- Loss calculators
- Emergency hotlines

AMA’s website can also be found on this guide. This information can quickly provide information and resources to better prepare community members for emergencies.

Resources:

- Emergency Quick Tips: [Emergency Quick Tips.pdf](#)

3.2 Census Form

This census form will be used by AMA to better understand the demographics, assets, and special considerations of community members. Only one member per household is asked to fill out this form. This form will ask questions on:

- Demographics
- Resources and skills
- Special considerations
- Interest in volunteering with the Emergency Collective

Please note that your participation is voluntary. You do not have to provide any information that you do not wish to provide or answer any questions that you prefer not to answer. If you decide not to continue, you may exit the form at any time, and the data will not be used. This information will only be accessed by AMA to help strengthen our emergency preparedness and better understand the demographics of the community for times of emergencies.

Resources

- Google form of the questions: [AMA Censo de Miembros de la Comunidad - Google Forms](#)
- Printable version of the form: [AMA Censo de Miembros de la Comunidad - Google Forms.pdf - Google Drive](#)

3.3 Farmers Onboarding

If you have a farm, please fill out this form in addition to the census form. This form will be used by AMA to better understand the strengths, vulnerabilities, and resources of participating farms. The information obtained from this form will only be accessed by AMA to help strengthen our emergency preparedness and network of agrarian allies. Sections included in this form are:

- Contact Information Questions
- Crop Production/Marketing Questions
- Disaster Relief Questions
- Risk Assessment Questions
- Outreach and Community Assessment Questions

Please note that your participation is voluntary. You do not have to provide any information that you do not wish to provide or answer any questions that you prefer not to answer. If you decide not to continue, you may exit the form at any time, and the data will not be used.

Resources

- Google form of the questions: [AMA Farmer Onboarding](#)
- Printable version of the form: [Printable AMA Farmer Onboarding.pdf](#)

3.4 Emergency Kit Preparation

The following supplies are recommended when creating an emergency kit for your household. The list is in order of priority, with the first item being the highest priority. This emergency kit should be stored in an accessible location in your household. The list below was compiled using conversations with community members, research of past WPI PRPC projects, and online government resources.

1. Water
2. Imperishable Food
3. Solar energy to charge phones, etc.
4. Batteries
5. Flashlights
6. Weather Alert radio (NOAA if possible)
 - a. Hand crank/battery powered
7. First aid kit
8. Tools to clear farm area
 - a. Chainsaws
 - b. Ropes
 - c. Saws

9. Gas
10. Oil
11. Satellite phone
12. Flash drive for essential documents
 - a. Financial records
 - b. Medication list and pertinent medical information
 - c. Proof of address
 - d. Deed/lease to home
 - e. Passports
 - f. Birth certificates
 - g. Insurance policies
13. Pets needs (if applicable)
 - a. Food for pets
 - b. leashes/collars
14. Blankets
15. Sleeping bags
16. Can opener
17. Cash
18. Duct tape
19. Fire extinguisher
20. Hand Sanitizer
21. Notepads and pens/pencils
22. Paper plates, cups, utensils
23. Paper towels
24. Plastic bags
25. Plastic sheeting
26. Rope
27. Toolkit
 - a. Wires
 - b. Screw driver
 - c. nails
 - d. Crowbar
 - e. Wrench
28. Change of clothes
29. Whistle

3.5 Farmer Technical Sheet

Refer to the Farmer Technical Sheet to find external resources for:

- Important Calculations (water usage, income breakdown, and losses)

- Animal Preparation
- Food and Crop Preservation
- Drought Resources
- Funding Documentation and Tips

Resources

- Farmer Technical Sheet: [Español Ficha.pdf](#)

3.6 Attend or Host Workshops

It is highly encouraged to attend workshops regularly related to emergency preparedness. AMA will be facilitating emergency preparedness workshops once a month. These workshops will strengthen emergency preparedness and foster community between rural and urban communities. Additionally, organizations and individuals are encouraged to share other upcoming workshops and events that they are hosting using the following Google form.

Resources

- Google Form to submit your upcoming workshops and events: [AMA Talleres y Eventos](#)

3.7 Refrigerated Medication Resources

If you require any medication that has to be refrigerated, locate a distribution center near you before an emergency. Find information in Section 3.82 locate nearby distribution centers. You may also alert AMA if you have power and resources to store others' medications as well.

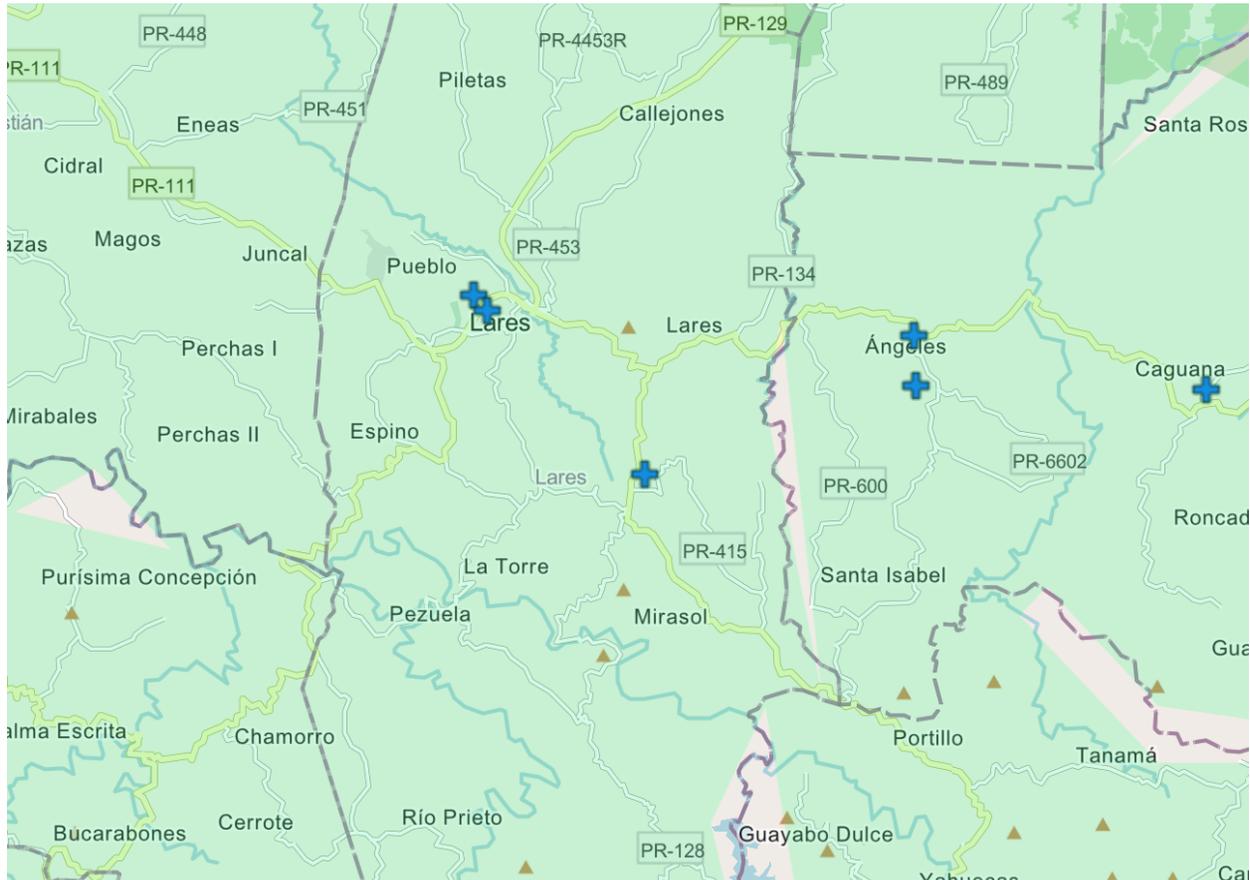
3.8 View Maps (Shelters and Distribution Centers)

Refer to maps of shelters and distribution centers prior to an emergency. These maps will provide information on the nearest shelters in Lares and distribution centers in Puerto Rico. Please refer to the resources below for more details for each resource.

Resources

- Map of Shelters - [ArGIS Mapa de Refugios en Puerto Rico](#)
- Distribution Centers - [FEMA Puerto Rico Disaster Centers](#)

3.8.1 Map of Shelters near Lares.



Map of shelters from ArcGIS near Lares. The blue “+” marking indicates the shelter location. More details on the shelters: [ArcGIS Mapa de Refugios en Puerto Rico](#).

3.8.2 Distribution Centers in Puerto Rico

FEMA has a page on their website dedicated to providing resources for Puerto Rico in times of disasters. At the bottom of the resource includes a section dedicated to distribution recovery centers. This will be updated in times of emergencies by FEMA. More information on FEMA: [FEMA Puerto Rico Disaster Centers](#).

3.9 Consolidate Important Documents

Consolidate any important documents on both a flash drive and on paper. Ensure these paper and digital documents are in a safe, accessible location in case of emergency. At a minimum, these documents should be consolidated:

- Financial records
- Medication list and pertinent medical information

- Proof of address
- Deed/lease to home
- Passports
- Birth certificates
- Insurance policies

Farmer Specific Documents:

- Employer Identification Number (EIN)
- Tax documents and financial statements
- DUNS number
- Prof of land tenure/security

Resources:

- USDA Puerto Rico Farm Service Agency (FSA) information: fsa.usda.gov
- DUNS number information: pr.gov

3.10 Create a Family Emergency Contact Plan

Create a family emergency plan for your household before an emergency. This includes:

- Compiling important information about household members
- Creating a directory of contacts
- Establishing a mainland contact

At a minimum, your family emergency plan should include contact information for your household. This should include any personal information on household members from Section 3.9 and a brief document with the most important information about each individual, such as important medications, name, age, etc.

Your family emergency plan should also include a directory of contacts to family members, friends, and emergency agencies, that could be referred to easily. It is also beneficial to create a list of family, friends, and neighbors that are both nearby and outside of the area.

In the event of an emergency where the communication in Puerto Rico is not available, ensure you have a predetermined contact on the mainland. Communication may be more difficult on the island and it may be easier to communicate with individuals on the mainland. Ensure the name and phone number of your mainland contact is in an accessible location digitally and on paper.

4.0 Emergency Declared

4.1 Rapid Onboarding Volunteer Form

If you are interested in volunteering during times of emergencies, please fill out the following Rapid Onboarding of Volunteers Form. This information will be used by Apoyo Mutuo Agrícola to better understand the skills and assets of our volunteers and strengthen our response to emergencies.

Volunteers may receive emails and/or text messages to engage in brigades and communicate about skills and resources.

Participation is voluntary. You do not need to provide any information you do not wish to provide or answer any questions you would prefer not to answer.

Resources:

- Google form to volunteer: [Incorporación Rápida de Voluntarios](#)

4.3 Prepare Animals

It is recommended a separate emergency kit is created for animals. FEMA recommends this kit includes:

- Feed and water
- Supplements
- Veterinary records
- Proof of ownership
- Supplies such as rope, halters, cleaning supplies, knives, etc.

Additionally, in the event of an evacuation where livestock must be left behind, it is important for livestock to have:

- Access to highground
- A strong shelter
- A form of identification.

Resources:

- 5 Tips for Protecting Livestock During a Disaster: [Fema.gov](#)
- Animal Preparedness for Hurricanes: [Hawaii.edu](#)
- Livestock Disaster Preparedness: [humanesociety.org](#)

5.0 During an Emergency

5.1 Reference Shelter and Distribution Maps

Refer to any maps seen in Section 3.8 for nearby shelters maps. Refer to the FEMA resource for updated nearby distribution centers.

Resources

- Map of Shelters - [ArGIS Mapa de Refugios en Puerto Rico](#)
- Distribution Centers - [FEMA Puerto Rico Disaster Centers](#)

6.0 Days After an Emergency

6.1 Rapid Response Form for Farmers

The rapid response form for farmers will be used by AMA to assess the needs of farmers immediately following an emergency. If possible, volunteers and resources are distributed as needed based on answers to this form. Included in the form are:

- Contact information questions
- Assessment of medical resource and volunteer needs

Participation is voluntary. You do not need to provide any information you do not wish to provide or answer any questions you would prefer not to answer.

Resources:

- Rapid response form for farmers: [Evaluación Rápida del Agricultores](#)
- Printable rapid response form for farmers: [Evaluación Rápida del Agricultores Imprimible](#)

6.2 Rapid Response Form for Community members

The Rapid Response form for community members will be used to assess the needs of community members immediately following an emergency. Please fill out this form if you or anyone you know are in need of any resources or assistance. Farmers should fill this form out in addition to the Rapid Response for Farmers form.

Participation is voluntary. You do not need to provide any information you do not wish to provide or answer any questions you would prefer not to answer.

Resources

- Rapid Response Google form for community members: [AMA Evaluación Rápida Google Form](#)
- Printable Rapid Response form for community members: [AMA Evaluación Rápida para los Miembros de la Comunidad - Google Forms.pdf](#)

6.3 Volunteers Lookout for Communication

If you filled out the Rapid Onboarding of Volunteers form in Section 4.1, please be on the lookout for any emails or text messages from Apoyo Mutuo Agrícola regarding volunteering.

These emails may contain important information on disaster relief planning, and planning/attending brigades. Volunteers may receive emails from AMA at apoyomutuoagricolapr@gmail.com.

6.4 Emergency Brigades

Following an emergency, volunteers may be asked to participate in emergency brigades. These brigades may include clearing trees and debris, distributing food and water, and responding to submissions from the Rapid Response form.

If you are unable to help with physical labor activities, please still consider volunteering as those helping with organization and administrative tasks are essential to AMA's emergency brigades.

6.5 Participate in Holistic Health

Please make sure that you are being mindful of your emotions and mental health following a disaster. These disasters can have a large mental toll on oneself and participating in brigades can be physically, emotionally, and mentally tiring. Consider using the following holistic health practices:

- Meditation
- Breathing
- Yoga
- Engaging in a Ceremony/Spiritual Session

Consider growing and utilizing medicinal plants as they can have great health benefits. These medicinal plants can be used for medicinal purposes as well as holistic health purposes, such as aromatherapy and improving mental health. The following spreadsheet includes medicinal plants that could be grown and their benefits.

Resources

- Spreadsheet of medicinal plants and their benefits: [Medicinal Garden Planning Workbook](#)

6.6 Crop/Seed Sharing

If your farm has excess crops or seeds following an emergency, consider sharing these resources to support mutual aid within your community. If you need help finding community members to share with or transporting these resources contact AMA at apoyomutuoagricolapr@gmail.com.

6.7 Harvest/Preserve Crops

It is recommended to harvest any crops which have been uprooted due to the emergency. Preservation of these and other crops can aid in food security and food safety during post-disaster conditions.

Resources:

- Beginners Guide to Canning: [Canning 101: How to Can Food for Beginners](#)
- Seed Storage: [How to Store Seeds for the Long Term: Seed Storage 101](#)
- Food Preservation: [11 Ways to Preserve Food at Home](#)

7.0 Weeks After an Emergency

7.1 Brigades

Continue engaging in brigades. These brigades may include rebuilding and repairing buildings, as necessary, and responding to submissions from the Rapid Assessment form for community members.

If you are unable to help with physical labor activities, please still consider volunteering as those helping with organization and administrative tasks are essential to AMA's emergency brigades.

7.2 Review Marketing Strategies

For-profit farms only: It is recommended marketing strategies are reviewed following an emergency as changes in harvesting patterns, road accessibility, and food security will have effects on demand. The resources listed below are intended to aid in reviewing, revising or creating marketing strategies.

Resources:

- USDA recommendations for selling products: farmers.gov

7.3 Apply for Funding

After a disaster or emergency, your household may be eligible for certain funding. Ensure you have properly consolidated your documents, as mentioned in Section 3.9 for ease while applying for funding.

FEMA has created two major programs for individuals to help with recovery following a disaster. One of these programs is called the FEMA Individual Assistance (IA) Program. This program provides financial help and direct assistance to individuals and households.

Within this program is the Individuals and Households Program (IHP), which provides financial assistance and direct services to individuals and households who have uninsured or underinsured necessary expenses and serious needs. If you are eligible for this program, the application can be found on the Disaster Assistance website: [Disaster Assistance](#).

To be eligible for the IHP program, you must:

- Be a citizen of the United States
- Prove your identity with your Social Security number
- Confirm the disaster-damaged home is your primary residence
 - This is normally automatically checked by FEMA
- Tell FEMA about any insurance coverage you have that can help you with your disaster-caused needs
 - If you have insurance coverage, you will need to give FEMA proof of the insurance settlement or a letter explaining you were denied coverage before FEMA can determine what assistance you are eligible for.

Additionally, the IA Program also includes the following programs:

- Mass care and emergency assistance
- Disaster case management
- Crisis counseling assistance and training program
- Disaster legal services
- Disaster unemployment assistance
- Voluntary agency coordination

For Farmers: The USDA has compiled funding resources for the caribbean onto one webpage, linked below, and is sectioned into:

- Disaster Assistance
- Assistance for Agriculture and Livestock
- Programs for the conservation of natural resources

Resources

- FEMA Individual Assistance (IA) Program:
 - [More Information from Puerto Rican Government](#)
 - [More Information from FEMA](#)
 - [Application for the IHP Program](#)
 - [Step-by-Step guide on applying for IHP program](#)
- USDA Caribbean Farmer Disaster Assistance: [USDA.gov](#)

7.4 Crop/Seed Sharing

It is important to continue the process of crop and seed sharing in the weeks following an emergency. Refer to section 6.6 for crop and seed sharing information.

7.5 Plant More Crops

If the emergency has uprooted or destroyed a significant amount of crops, it is important to begin the process of replanting in the weeks following an emergency. Listed below are resources specific to replanting crops after disasters.

Resources:

- Planting in a post-hurricane landscape: [NaplesGarden.org](#)

7.6 Calculate Losses

After experiencing a disaster, it is important to calculate your losses. For example, if there was damage to your household, vehicles, or impacts to your work, create a comprehensive list of the items that were damaged and the anticipated cost to repair and cost to originally purchase. This can be potentially beneficial when applying for funding and understanding the damages done by disasters.

Resources

- Calculating farm losses: [cch.com](#)