

A GUIDE FOR RESILIENT HOUSING DESIGN IN ISLAND COMMUNITIES



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ASOCIACIÓN DE CONSTRUCTORES DE PUERTO RICO



COMMUNITY ENGAGEMENT: PREPARE FOR ACTION TOGETHER

Ways in which a community can come together and prepare for and respond to future challenges



Communities are the backbone of society. Even when households carry out their individual plans, people come together when they live in a shared neighborhood and have common concerns in terms of safety, housing, and services. Engaging communities to establish an emergency protocol that could apply before, during, and after the emergency is one of the best ways to prepare against adversity.

The aftermath of Hurricanes Irma and Maria has shown Puerto Ricans and people all around the globe that there is nothing more resilient than community bonds. Every person and family that went through these natural disasters can share a story on how a friendly neighbor threw an extension cord over to share power from their generator, how their community came together the day after the storm to clear up debris off of the streets, or how their neighborhood organized potlucks to share the food they had on hand.

TYPES OF STRATEGIES LISTED IN THIS SECTION

STRATEGY #	26	27	28
STRATEGY NAME/TITLE	DEVELOP A COMMUNITY PLAN	IDENTIFY + PREPARE SAFE COMMUNITY SHELTER	INSPIRING POST-DISASTER PLANNING FOR COMMUNITY
DESCRIPTION	To improve life quality, minimize damages and respond to a natural disaster, a community must have a committed and organized group of neighbors to enable the planning and implementation of projects that benefit the community as well as the receipt of aid when necessary. This strategy focuses on what to do and who can join the process of organizing your community for response and recovery.	Taking care of each other makes a community resilient. After an emergency, government and private sector assistance may take some time to arrive. Therefore, your community should be considered as the first line of response after a disaster. This strategy focuses on showing how to create a safe space in the community.	In the event of a natural disaster, having a community plan for emergency response minimizes the risks and allows greater effectiveness in recovery and response processes. This strategy helps create and implement a strategic plan so that your community can continue recovering from its identified immediate needs.
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In many cases, especially in communities around the mountainous central region of the main island, community groups provided first response and aid to impacted families, and they even helped save lives. One reason behind this is the fact that many municipalities were cut off from main distribution areas, not only because telecom failed, but also because fallen trees, electric poles, debris, and landslides blocked main roads. In more extreme cases, bridges that functioned as the sole access points to some communities caved in and fell, consequently isolating hundreds of families.

Community groups have also had an important impact in the long-term recovery of hundreds of families. Many of them, some working under non-profit organizations and religious congregations, transformed into relief brigades offering aid across the island in the form of



INTRODUCTION

food, supplies, water, medicine, shelter, and support for reconstruction. In fact, dozens of community groups that made a significant contribution to Puerto Rico's recovery are not residents: many groups of Puerto Ricans living in the continental United States and beyond organized aid from afar, demonstrating that community bonds know no frontier, surpassing any and every physical distance.

In the end, these times of turmoil became an opportunity for people across the island to get to know or develop deeper relationships with their fellow citizens and harness the power of mutual solidarity. To avoid dependence on governmental or any external aid, the best way to harness both short- and long- term resilience is to ensure health and safety across Puerto Rico and beyond through community empowerment.

STRATEGY 26

DEVELOP A COMMUNITY PLAN

To improve life quality, minimize damages and respond to a natural disaster, a community must have a committed and organized group of neighbors to enable the planning and implementation of projects that benefit the community as well as the receipt of aid when necessary. This strategy focuses on what to do and who can join the process of organizing your community for response and recovery.

Strategy in Action

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- **1**. Create a community profile and make a map of your community
- 2. Gather your community members
- 3. Develop plans for:
- a. Evacuation
- b. Communication
- c. Transportation

WHAT YOU NEED TO KNOW

- An organized community facilitates conversations with governmental and non-governmental organizations, as well as the private sector, to promote general welfare, the local economy and the opportunities to recover from a natural disaster.
- ► For a strategy to succeed, a community should work as a unit and there must be good communication between its members.



SUPPORTING STRATEGIES

23	24	25	27	28
Develop a Household Emergency Plan	Choose a Space to Keep Your Family Safe	Respond + Begin Household Recovery	Identify + Prepare Safe Community Shelter	Inspiring Post- Disaster Planning for Community

CREATE A COMMUNITY PROFILE AND MAKE A MAP OF YOUR COMMUNITY

It is important to be aware of what your community is like, who are its members, the location of each member, and the people around it. This will facilitate the community organization process and future planning.







STRATEGY 26

DEVELOP A COMMUNITY PLAN

CREATE A COMMUNITY PROFILE AND MAKE A MAP OF YOUR COMMUNITY



ELEMENT 1: NEIGHBOR DIRECTORY

DESCRIPTION

- Members: Include a photo, telephone number, address and any special situation of each member in your community.
- Use this inventory for roll call in case of an emergency.
- Data: Include the telephone number and address of each neighbor.
- Identify vulnerabilities, sicknesses, and/or disabilities of each member in your community.
- See supporting document Neighbor Directory.



ELEMENT 2: COMMUNITY ORGANIZATION

- Identify and recruit people with special skills/talents in different areas (such as physical/mental health, construction, rescue, etc.)
- First aid: Identify people with medical and nursing training as well as people who are certified
- for cardiopulmonary resuscitation (CPR). Include the phone number and address for police
- stations, firefighters, emergency management agencies, National Guard, hospitals and ambulance services.
- Committees: Create work groups to help with emergencies, recreation, sports, cleaning, etc.
- Response vehicles: 4x4 vehicles, pick-ups and vans
- Communication: Identify neighbors that could facilitate communication efforts through satellite phone, sign language, other languages, as well as people with writing skills, etc.



ELEMENT 3: HOUSING

- Identify occupied and unoccupied homes, as well as their household composition while making sure you capture the following data (as applicable):
- Homes with pets
- Unoccupied homes
- Homes with water tanks
- Homes with renewable energy systems
- Homes with working power generators
- Homes exposed to risk



ELEMENT 4: PHYSICAL-NATURAL ENVIRONMENT

- Take photos and videos of the current conditions of your community. Identify:
- Natural characteristics, such as:
- Natural hydrographic elements: rivers, mineral springs, creeks, areas prone to flooding
- Green zones: forests, crops, trails
- Risk zones and safe zones (Chapter 1)
- Infrastructure

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DESCRIPTION

- Energy: substations. distribution cables, electrical boxes, electrical distribution wiring (underground, aerial, the location of power substations) and diagrams of how electricity reaches a home
- Water: drainage, ditches, dams, pump stations, access point water distribution pipes or cisterns, access points to drinking water
- Transportation: Main access roads, possible access routes, roads for emergencies, pedestriar paths, poles, traffic lights, signs
- Communications: Location of cable TV, Internet and telephone equipment (boxes, antennas, cables)



- such as:
- Security: Fire departments, police and emergency stations
- Food and supplies: Gas stations, supermarkets, grocery stores and hardware stores
- Finances: Bank branches, credit unions, automatic teller machines (ATM)
- Solidarity in case of emergencies: Shelters, nearby communities



ELEMENT 5: SOCIO-ECONOMIC

- Get to know your neighborhood beyond its homes. Identify suppliers of goods and services,
- Health: Hospitals, ambulance services, pharmacies, drug stores



ELEMENT 6: RECORD OF NATURAL DISASTERS

- Document the infrastructure's current conditions through photos, videos, and interviews to show evidence of damages and enable emergency services as well as the processing of claims with insurance companies.
- Add a new section for each natural disaster. This will allow you to see the evolution of the community and inform future building and repairs.

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DEVELOP A COMMUNITY PLAN

GATHER YOUR COMMUNITY MEMBERS

STEPS	BEFORE THE MEETING	AT THE START OF THE MEETING	AT THE END OF THE MEETING
DESCRIPTION	 Prepare an agenda (see example). 	 Explain the purpose of the event. Explain the work dynamic to manage expectations for time use and desired achievements. Establish rules of order for the meeting. 	 Provide a brief summary of the discussed contents. Acknowledge efforts and contributions. Receive opinions and suggestions. Identify conclusions, commitments and agreements. Encourage the next steps and sustained commitment. Call for a shared applause.
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DEVELOP PLANS FOR:

EVACUATION

- Plan the community members' evacuation and practice it annually. In your home, practice evacuation routes to reach a shelter (Strategy 27), as well as the fulfillment of the assigned roles to each person and committees.
- Trace an evacuation route on a map and distribute it among the community.
- Designate a team to manage the vulnerable population or emergency cases during the evacuation.
- Take notes of what worked and what didn't work during the annual drill.
- Evacuate BEFORE the emergency. In case of an unexpected event, evacuate if it is safe to leave and if the route to the safe space does not present life-threatening risks. Take your Go-bag (Strategy 23) and follow the instructions from the heads of the household, community leaders and authorities.

COMMUNICATION

- Designate people to notify community members about drills or evacuations.
- Establish communication with the Emergency Management Agency to coordinate assistance processes.
- Create a system so that individuals can alert about the assistance they need.
- Designate a liaison person to provide important information before, during and after an emergency or disaster, as well as to update social media pages.
- You can also use text messaging on your smartphones, Facebook and WhatsApp as a tool to help you keep in touch with your local communities and when you are away from the community as well. Since the use of apps requires electricity and Internet signal, it is important to have electricity for the community in a centralized location.

PARTIAL EVACUATION

- Evacuation of homes in risk zones
- Evacuation from homes to the community's safe space or municipal shelter

TOTAL EVACUATION

- Evacuation of the whole community.
- Evacuation from the community's safe space to a municipal shelter.

OPERATIONS AND MAINTENANCE TIPS

- ▶ The response capacity of your community will depend on how wellinformed the action plan may be for the prevention and response to emergencies and disasters.
- their validity.
- ► Make periodic inspections to ensure the usefulness of the community's assets.
- ► Confirm that the community has the economic resources to respond to disasters as a community (establishment of dues).
- ► Have trained human resources to operate the community's assets, either voluntarily or through paid services.
- Provide insurance protection against damages to shared properties.

TRANSPORTATION

- Identify evacuation routes as established by the community and Emergency Management Agencies.
- Organize assembly points from which to leave for the designated shelter.
- Promote walking or riding a bicycle through the community.

► Review your response documents before each season to ensure

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STRATEGY

IDENTIFY + PREPARE SAFE COMMUNITY SHELTER

Taking care of each other makes a community resilient. After an emergency, government and private sector assistance may take some time to arrive. Therefore, your community should be considered as the first line of response after a disaster. This strategy focuses on showing how to create a safe space in the community.

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Strategy in Action

- **1**. Determine the Location
- 2. Space Considerations
- a. Interior
- b. Structure and Surroundings
- 3. Equipment

Community

- 4. Design an Action Plan
- 5. Practice an Annual **Emergency Evacuation Drill**

STEP 1 - DETERMINE THE LOCATION

Use the community map from Strategy 26 to identify which buildings are in a safe area within the community or its surroundings.

Once you identify these spaces, meet with the person responsible for the space to obtain authorization and discuss its best usage as a community shelter.

PUBLIC BUILDINGS

PRIVATE BUILDINGS

- ► Public schools
- Community centers, activity and recreation rooms
- Churches

- ► Malls
- recreation rooms





WHAT YOU NEED TO KNOW

- ► Use the search engine on the American Red Cross webpage (https://www.redcross.org/cruz-roja.html) for emergency shelters and stay tuned for the news to know when emergency shelters will open.
- ► You must occupy the community shelter when the location or structure of your home presents a risk to your safety.

SUPPORTING STRATEGIES

23	24	25	26
Develop a Household Emergency Plan	Choose a Space to Keep Your Family Safe	Respond + Begin Household Recovery	Develop a Community Plan



If your community surroundings DO NOT offer a safe space for shelter, you must move from your community to your nearest government emergency shelter.

► Community centers, activity and

Empty structures and buildings





IDENTIFY + PREPARE SAFE COMMUNITY SHELTER

STEP 2 - SPACE CONSIDERATIONS

A. INTERIOR

NECESSARY SPACES

- Area for food preparation
- Area for sleep/rest
- Area for restrooms
- Space for pets
- Multipurpose space (for meetings, training, recreation, leisure)

STORAGE

- Food
- Hygiene products
- Equipment and refrigeration
- First-aid kits

B. STRUCTURE AND SURROUNDINGS

- Access: Must be suitable to allow access to a ground/air ambulance.
- Verify that the space complies with the local structure code for wind and seismic hazards and risks. (See FEMA P-361 Safe Rooms for Tornadoes and Hurricanes: Guidance for Community and Residential Safe Rooms)
- Solid Waste: Evaluate the distance of the structure where solid waste is headed to protect people's health.
- Energy: Consider a renewable energy supply system that powers a battery bank.
- People with disabilities: Access ramps for people with disabilities. The ramp should be 1:10 and 3' wide.
- Risks: Secure the premises from surrounding trees so that they will not affect the structure. Ensure the free flow of runoff water around the facilities.
- Windows. Check the functionality of window operators and sashes. They allow ventilation and natural lighting.



STEP 3 - EQUIPMENT

SUPPLIES

FIRST AID

- Drinking water for consumption and hygiene.
 Consider one gallon of water per person per day.
- day.
 Non-perishable food. Consider the contribution of non-perishable products
- made by neighbors of the community.Fuels for lighting, kitchen, vehicles, tools, and power generators
- Tools and replacement parts for equipment in use
- Refrigerator for medicines and perishables

COMMUNICATIONS

Life support equipment

First-aid kit

Defibrillator

Radio AM/FM Landline phone Radio (KP-4, HAM)







Tesla Battery Daguao Naguabo





IDENTIFY + PREPARE SAFE COMMUNITY SHELTER

STEP 4 - DESIGN AN ACTION PLAN

STEPS	SPACE PREPARATION	USE REGULATIONS	COMMUNICATIONS	STEPS	SPACE IN USE
DESCRIPTION	 Security. Confirm that the chosen structure is reinforced to protect people during the emergency. Repair cracks. Seal openings with panels or shutters. Implement security strategies to avoid altercations or thefts. Minimize risks Trim trees as a preventive measure. Collect items that could become projectiles. Clean the sewage. Organize work teams and distribute tasks among community members. 	 Establish use regulations such as: An operating schedule Behavior and coexistence Flow of people (to avoid lines and congestion) Proper water distribution and use Pet management (food, walks, rest, waste) in a responsible manner Clean-up of the areas Preparation and distribution of food and products. Have at least a 10-day supply. Make an inventory frequently. Verify that supplies are in a safe area. Establish a plan for solid waste management, recycling, reuse and composting. 	 Use the Directory that you developed in Strategy 26 for roll call. Communicate the existence, access, and use regulations of the space in community meetings. Contact emergency teams and authorities before, during and after the natural disaster to inform the community properly. Keep track of the authorities' news and instructions. 	DESCRIPTION	 Implement your plan. Call for your work teams with their respective work plans; this will allow the community shelter to start functioning accordingly. Protect and monitor the vulnerable people of the community during the emergency. These are: people 65 and over, pregnant women, babies, children, people with disabilities, people with medical conditions or whose medical treatments need electricity (refrigeration, breathing assistance, dialysis, etc.). If possible, provide forms of entertainment, distraction and recreation during and after the event using musical instruments, radio, books for children and adults, coloring books, crossword puzzles, word games, board games, and toys.



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STRATEGY

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IDENTIFY + PREPARE SAFE COMMUNITY SHELTER

STEP 5 - PRACTICE AN ANNUAL EMERGENCY EVACUATION DRILL

- PRACTICE! Practice the evacuation of your community annually to confirm that the plan continues to be up to date and effective.
- Take notes of what worked and didn't work after each drill.
- Practice the evacuation routes for your community, the move to a shelter in the middle of a natural disaster, and the assigned roles to each person.



Cano Martin Peña, San Juan





INSPIRING POST-DISASTER \$-\$\$ PLANNING FOR COMMUNITY

In the event of a natural disaster, having a community plan for emergency response minimizes the risks and allows greater effectiveness in recovery and response processes. This strategy helps create and implement a strategic plan so that your community can continue recovering from its identified immediate needs. The following image describes the interactions of the short- and long-term planning cycle in a community. Long-term preparation efforts support the short-term response. The more a community plans for emergency preparedness, the faster the response and recovery will be. As you can see in the image, this is a cyclical process that proposes mitigation after response as the best way to react towards natural disasters in the future.

- Strategy in Action
- 1. Stage 1 Response
- 2. Stage 2 Recovery
- 3. Stage 3 Mitigation and Long-Term Strengthening

DESCRIPTION + OPERATION

- Ensure the well-being of those who survived the disaster or emergency... first life, then property. The post-emergency plan is divided into two stages:
- Stage 1 Response: it consists of the actions taken when danger is imminent, currently happening, or has just occurred. These actions are meant to save lives, property, and the environment. This stage may include staying in a shelter, ensuring water and food, organizing search parties and rescue teams, providing medical attention to those in need, and creating access to provide help, among other possible activities.
- Stage 2 Recovery: it consists of actions taken after the response, to bring the community back to its initial state and normal routine as soon as possible. This can include: the reinstatement of essential services, facility and home reconstruction, among others.
- Stage 3 Mitigation and Long-Term Strengthening: involves enabling community recovery and its longterm improvement through a participatory strategic plan that serves to guide decision making for the benefit of all community members, to improve and resolve the basic needs of the community, and move it towards reaching its collective vision of the desired future.

It is important to understand the stages of the response process to a natural disaster since it starts immediately after the disaster and could take years to be completed. The following image contextualizes the stages of recovery and the time they could take.







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STRATEGY

INSPIRING POST-DISASTER PLANNING FOR COMMUNITY

STAGE1 – RESPONSE



STEPS

DESCRIPTION

ESTABLISH A RESPONSE COMMITTEE

- Train people in the community so that they can communicate and respond effectively.
- Certify the members of the committee through the CERT Program (Community Emergency Response Teams) for them to help while government rescue brigades arrive. The program requires candidates to be of legal age and three days of training.



COMMUNICATE

- Register your community with the local and federal government for post-emergency assistance.
- AEMEAD (Local Government) Agency)

The State Agency for Emergency and Disaster Management (AEMEAD, http://www.aemead.pr.gov) is the agency in charge of coordinating all of Puerto Rico's government and private sector resources to provide emergency services as quickly and effectively as possible.

■ FEMA (Federal Government Agency)

The Federal Emergency Management Agency (FEMA, www.Disaster Assistance.gov) is a federal government entity that is in charge of organizing emergency help and sheltering assistance in the event of a natural disaster. Notify damages by calling 1-(800) 621-3362 or visiting their webpage.

Remember! It is always important that community members stay informed about location of shelters and how they operate (Strategy 27).



DOCUMENT THE DAMAGES

- Document all damages to facilitate communication with emergency agencies, towns and insurance companies.
- Take photos or videos, interview neighbors and highlight the damages on a map.
- Add the effects of every natural disaster to the community profile. This will help you register your community with emergency management agencies.





ESTABLISH A PLAN TO MANAGE SOLID WASTE

Recycle as much as you can to reduce the amount of waste transported to dump sites.

STEPS

DESCRIPTION

- Identify recycling stations and stockpiling of recyclable waste.
- Do not burn trash for it could be a risk to the community's health and safety.
- Divide your waste to facilitate its management, and group waste such as:
- Vegetative material trees, branches, leaves, plants (DO NOT place these in bags)
- Recyclable material plastic, glass, metal, cardboard
- Non-recyclable material -
- areas.
- Contact your municipal administration or garbage collection.

demolition/construction materials (carpets, walls, furniture, wood, mattresses, plumbing material, roofing material, roof tiles, tiles); appliances (air conditioning, fridges, stoves, water heaters); and electronics (computers, televisions, radios and anything that has an electric cable).

Make sure that waste does not block pedestrian accesses or traffic routes and is not in the way of runoff water or flood-prone

collection service to notify that waste is separated and ready for

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STRATEGY

INSPIRING POST-DISASTER PLANNING FOR COMMUNITY

STAGE 2 – RECOVERY



STEPS

- RIPTION Restore blocked accesses if possible.
 - Contact public entities that can help restore essential services.

PHYSICAL

Establish a plan for home reconstruction.



EMOTIONAL

- Address the psychological and emotional aspects of those who survive a natural disaster.
- Restore normal conditions for young children through collaborative and recreational activities.
- Organize discussion groups to share emotions and provide a positive message.
- If possible, consider setting time and space for relaxation, exercise, or recreation because distractions help manage emotions during difficult times.



LONG-TERM

- Use destruction as an opportunity to innovate and create a better future.
- Organize projects that focus on the future as a way to cope with recovery.
- Collaborate with non-profit organizations, educational institutions, and the private sector to find experts and identify funding.

STAGE 3 – MITIGATION AND LONG-TERM STRENGTHENING





ANALYSIS

STEPS

DESCRIPTION

 In accordance with community organization processes and activities (Strategy 26), it is necessary to lead a discussion to rethink the community's desired future.

- Document priority needs of the physical environment.
- Identify and document hazards and opportunities.
- Recognize, document and share reconstruction and mitigation plans of neighboring communities as well as local, national and federal governments.

07 COMMUNITY ENGAGEMENT

 Facilitate a participatory dialogue that allows the establishment of a strategic plan for your community that includes future projects that will meet the identified needs.

 Document inputs, agreements and dissensions.

Set priorities by consensus.

 Identify sources of funding to start projects.

Establish a work schedule.



MOBILIZATION AND STRENGTHENING

- Authorize the activation of recovery work committees.
- Develop the necessary supporting documentation to begin with longterm recovery tasks.
- Develop proposals that will allow the commencement of agreed projects.
- Monitor and inform the progress of tasks to keep the community motivated and committed.
- Identify the next generation of community administrators and enable the development of their abilities to achieve sustainable community empowerment.

CENTRO COMUNITARIO DE CAIMITO, SAN JUAN

Description: Centro Comunitario de Caimito offers a safe space to hold community meetings, talks, and cultural events. In addition to being a meeting point for the community, this center provides assistance for families that haven't had their electricity restored yet and offers community health services. The center became an energy source for the future following the installation of solar panels as part of the #EstuarioRevive campaign from the San Juan Bay Estuary Program. This effort was supported by the GivePower Foundation and the Cypress Creek Renewables company. These panels were installed in Centro Comunitario de Caimito in response to the need to pool all efforts in a single place for the benefit of all -efforts that are already underway, although with some difficulties due to the power shortage. This is the only center that provides free community services. This project was made possible by hundreds of people, individual donations, and about a dozen corporate partners across the United States.

For reference: https://www.noticel.com/ahora/ centro-comunitario-de-caimito-recibe-paneles-solaresgratis/695621605



COMUNIDAD CORCOVADA, AÑASCO

For more information, visit https://comitecomunalcorcovada.weebly.com/ actividades-y-proyectos.html

Description: a community that has its own aqueduct and solar energy systems. It runs community centers, gymnasiums, and a community school.

The Corcovada community is located in the municipality of Añasco. For almost 40 years, Corcovada has had its own aqueduct system that provides drinking water to 145 families. The second Saturday of every month, the committee treasurer opens the building (which used to be a school) from 3:00 p.m. to 5:00 p.m. so that residents can pay their water bills. Additionally, efforts were made to secure legislative and municipal funding for the reconstruction of the site of their newly built community center (funds totalled \$350,000).





The community began building the center early in 2014, and its foundation stone, a symbol of its inauguration, was placed on Friday, February 21, 2014. This community center has the sole purpose of serving the community by providing a space for events and other services.

HOGAR ALBERGUE, JESUS DE NAZARET



Interviewee: Hogar Albergue para Niños Jesús de Nazaret, Patricia Valentin and Enactus RUM

For more information, visit: https:// hogarjesusdenazaret.org/en/quienes-somos/elhogar/

Hogar Albergue offers temporary living arrangements for children who have been victims of abuse, from newborns to 11-year-olds. Hogar provides a safe and positive environment where, aside from providing a loving atmosphere, the following basic needs are met: nutrition, transportation, education, medical care, and cultural activities. Hogar is a 501(c)(3) non-profit organization located in the municipality of Mayagüez.



INTERVIEW

Hogar Albergue is a residential space for abused children that have been removed from their homes. Here, children's basic needs are met, from the newborn stage until they reach 11 years of age. Enactus RUM began collaborating with Hogar because I approached them. Being a professor at the Mayagüez Campus, and as a volunteer of Hogar for many years, I saw the difficulties they faced every day, so I decided to talk with Enactus.

Hogar prepared for the hurricane just like everyone else, but they obviously did not expect the severity of the event. The administration and staff carefully planned and enacted their emergency plan (as required by law). When we saw the needs and difficulties Hogar faced because of the shortage of drinking water and electricity, as they tried to provide the best conditions possible for the 14 children under their care, we joined forces with Enactus RUM to consider how we could help reduce Hogar's weekly expenses, which amounted up to \$1,000 a week in diesel alone. We also met with United for Puerto Rico and decided to submit a proposal for the installation of a rainwater



tank that would make Hogar sustainable for future events like the one we went through. Currently, the tank is installed and connected to the most critical equipment, such as the washing machine and the bathrooms. Besides the tank, and through the efforts of the University of Wisconsin, we are now working on a solar panel system to be installed in the future. Throughout the recovery process, the administration and staff were key participants, especially the "nannies" that stayed with the children during the hurricane. Meanwhile, neighbors also came to Hogar and donated food, water, and gas.