

MAKING EFFORTS COUNT AFTER IRMA AND MARIA: HOUSEHOLD RELIEF AND RECOVERY IN PUERTO RICO



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Background



House affected by Hurricane Maria in Puerto Rico, October 2017.

Hurricane Irma hit the Caribbean islands on September 6, 2017. This was soon followed by hurricane Maria on September 20, 2017. Within Puerto Rico, the impacts have caused over 58 official casualties (in addition to 422 estimated deaths) and had estimated economic losses up to 73% of the country's GDP for hurricane Maria alone. This has resulted in the collapse and destruction of the energy infrastructure, severe disruptions to the water and wastewater infrastructure, destruction of hundreds of miles of roads and bridges, and caused severe disruptions to existing telecommunication infrastructure.

Recent studies by the University of Puerto Rico suggest poverty rates climbed from 44% to 52%, resulting from hurricane impacts. As the island-nation embarks its initial steps towards recovery, over one million households are currently engaged in self-recovery actions, and require additional assistance from government and non-governmental actors to support these actions.

During October 2017, an exploratory research was conducted across several households affected by hurricanes Irma and Maria in Puerto Rico. Additional interviews were conducted with local government officials and non-government organisations (NGOs) directly involved in emergency response and relief efforts in Puerto Rico. This work raised several key findings that inform a number of relief and recovery policy recommendations

Findings and policy recommendations

Although the impacts have been widely felt across the island; adverse impacts have disproportionately affected the most vulnerable communities and members of society. Despite paramount efforts, governmental and non-governmental organisations have insufficiently supported disaster relief and recovery efforts at the household level. This is partly because the impacts of Irma and Maria surpassed the institutional capacities of recovery agencies on the federal, state, and local levels, as well as NGOs. However, our research highlights several other explanations, which we have sub-categorised under 'Household disaster relief'; 'Household disaster recovery'; and 'Communications'. Against these findings we make several policy recommendations to improve future relief efforts, and to facilitate more effective household recovery in the medium and long-term.

I. Household disaster relief: Key findings

Governmental and non-governmental relief agencies are working in silos. They are not sharing information about which households they have provided relief efforts too. This has resulted in the repetition of tasks, and therefore an unequal distribution of resources. Relief efforts must be better coordinated, through coordination, consultation and collaboration across governmental and non-governmental agencies as well as affected households.

With the exception of some small Puerto Rico-based NGOs, most agencies have not carried out a comprehensive household needs assessment. Therefore, needs are misrecognised and *households are not receiving the relief support which they have identified for themselves.*



Debris and garbage left on streets five weeks after hurricane Maria. October 2017.

Therefore, the actions of relief agencies can exacerbate the vulnerability of some of the most vulnerable households across communities in Puerto Rico.

The *most vulnerable households within communities are often marginalised from relief* aid because many organisations do not directly visit households. Rather, aid is offloaded from trucks and cars in several locations across communities, and community members are expected to collect aid supplies. As a result, small and highly vulnerable households are less able to access aid. In particular, households with only elderly and less mobile people, households where a family member is disabled and must be cared for throughout the day, and households that are geographically isolated/on the periphery of the community.

Policy recommendations

- A **coordinated and multi-agency relief programme** must be created in preparation for future disasters. This must operationalise the diverse skills, knowledge, activities, capacities and facilities of governmental and non-governmental household relief organisations.
- Governmental and non-governmental relief agencies must create and maintain **direct lines of communication** to coordinate relief efforts. Development and improvement of specific protocols to guide and direct relief efforts and coordination amongst agencies can help address this issue.
- A comprehensive **household needs assessment must be carried out by visiting each household and speaking directly to household members**, primarily along most vulnerable communities identified in disaster risk management plans. Individual household visits can be facilitated through government agencies working in partnership with NGOs and/or community members, who can be trained to carry out needs assessment. This will distribute the workload and ensure more houses are assessed.
- Relief **aid must be directly delivered to the houses of particularly vulnerable** households i.e. the elderly, disabled or chronically ill. These households require additional support, as their limited mobility impedes their access to aid.
- Efficient **removal of debris and garbage** in the streets to avoid pests increasing in the area and spreading diseases, such as leptospirosis.

II. Household disaster recovery: Key findings



Hurricane damaged house in Puerto Rico. October 2017.

Households are key actors in the recovery process, and many have begun to carry out recovery activities. This includes cleaning houses, making ad hoc reparations to damaged houses and supporting neighbouring households.

Household composition is affecting how recovery efforts are being undertaken. Households are unequally able to carry out recovery efforts because of the size of households (i.e. number of household members), household income, and because some households have members that are less able to engage in recovery i.e. the elderly, disabled.

Many households, or members of households are reluctantly temporarily *migrating to the United States* because of the adverse impacts on their households. This is *most prominent among households with school-age children and people with primary health care needs* (I.e. diabetes, asthma, coronary pulmonary disease, mental health, dialysis). This is because these household members cannot access education or easily access primary healthcare due to the closure of schools and health facilities.

Many *working adults cannot engage in income earning activities* as their place of employment has ceased business as a consequence of adverse impacts from hurricane Maria. Also, many women who earn income through house-based businesses are unable to continue business because of the damages to the house. Some households are receiving *remittances from the diaspora*, particularly from extended family members living abroad.

The *cost of certain food items and basic household goods has increased* in local convenience stores. This is making it difficult for low-income households to purchase items, and can hinder household recovery.

Provision of recovery materials and tools are needed to support household recovery efforts. Households require cleaning products such as mops, buckets, sponges, bleach and water pressure machines to effectively clean and restore their houses. In addition, households require construction materials, building tools and financial support to begin fixing damage roofs and other housing structures, as well as replacing lost household items and furniture. Small households or households with people unable to carry out housing reconstruction (the elderly, disabled, or chronically ill) can require help with labour. In particular, provision of early stage recovery materials can empower households to speed up recovery efforts.

Policy recommendations

- **Participatory consultation** for recovery planning is highly recommended. This process must involve residents, community leaders, NGOs, mayors and local government officials, in order to identify and implement a shared vision of recovery.
- Re-establishment of people's access to secure **income earning activities** is paramount to support households to begin recovery.
- Primary building tools should be provided via **local tool libraries**. This can facilitate household self-recovery and strengthen social capital across communities.
- Restoration of **basic public services**, particularly primary healthcare and education, can **reduce the number of people who are reluctantly migrating overseas**.

III. Communication and information exchange: Key findings

There is confusion among households about the roles and responsibilities of different relief agencies on the federal, state and local governmental levels. In particular, households often perceive the state and local government levels have minimal relief and recovery responsibility. Whereas, the Federal Emergency Management Agency (FEMA) is perceived as the key player to support household relief and recovery.

Households are unable to access accurate information about the relief activities and recovery plans. In the absence of direct information provision from relief agencies, households are relying on print newspapers, radio and word-of-mouth as their primary information sources, which often provide inaccurate information. This is significant because *households are using this information to inform relief and recovery activities* at the household level. This has been primarily marked by inconsistencies and misinformation on how actions and processes are needed for the provision of public utilities (i.e. electricity, water, waste management), public services (i.e. health, education) and of federal assistance to households. For instance, most households believe that FEMA will not provide any financial assistance if they initiate some basic recovery efforts such as cleaning and disposing damaged household items. This has *discouraged some households from engaging in self-recovery activities* for additional weeks because they are waiting for FEMA's assessments and financial support, oftentimes aggravating their damages and losses within their household.

Policy recommendations

- **Roles and responsibilities of all government actors must be clearly defined** and described to all public and private actors engaged in recovery efforts, as well as the general public.
- Alternative communication techniques must be implemented to keep affected communities and households **informed of recovery actions and provision of basic services**. In particular, cars with loudspeakers can be used to deliver information to residents.
- Local governments and non-governmental actors need to **integrate accountability** in their disaster response and recovery planning process. In particular Government and NGO's must keep records on which households and communities are receiving recovery assistance, and make that information publicly available.

ABOUT THE AUTHORS

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