



Humanitarian relief and the search for solutions Post Hurricane María

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Description

A Puerto Rican student who experienced Hurricane Maria in Cayey, Puerto Rico and studies at the University of Puerto Rico at Mayagüez, where she participated in various Post-Maria relief efforts in the communities and conducted a research about the effect of power generators emissions in the health of the Puerto Ricans population as part of a Sociology class.



Post-Maria Timeline, source: NASA Earth Observatory images, Marlyn Martínez, RISE Workshop

Suggestions

Students who are interested in committing to a recovery effort, should have a clear understanding of what working in a disaster area will entail: the nature of the work site, weather, living conditions and others. They can be aware of the recovery efforts by doing research about the affected area and also, they can register with existing volunteer organizations and associations on campus, or with some government disaster response teams to be better prepared. The universities and colleges should consider making a long-term commitment to help the community and affected students. They can continue to help the affected students to go on with their studies, provide the student community webinars about the situation and how to overcome it, create resiliency programs, make work groups that study the viability of the affected area and invite students from undergrad to PhD to do research. Also, they can consider partnering with relief agencies that respond to disaster management to support similar efforts in the future. I recommend establishing a national interuniversity emergency management training program focused on natural events that keeps the population aware and prepared to act and survive. Furthermore, have direct and constant communication between the public and private sector to know with certainty the issues to be prioritized so as to join efforts in the management of food inventory, essential products, medicines, construction materials, among others. Educational systems must include in their curricula, compulsory seminars adapted to each level so that knowledge and interest in natural disasters and humanitarian aid are forged in the individual. In addition, all universities must offer students new degrees and classes related to the study of climate change and its effects, natural disaster management and resilience, sustainable energy, among others. Finally, consider having a team of engineers who are dedicated to the implementation of micro network systems for places with energy problems.

Challenges and Obstacles

Based on Maslow's Hierarchy of Needs I described the personal challenges I faced Post-Maria as seen in Figure 1. Starting with the first level known as the physiological needs, it was hard feeding me due to how difficult it was to get food but survived drinking lots of bottled water. As for security, I did not feel safe, either during the day or at night due to the incidents that were occurring. I feared for my life due to lack of security provided by the police. Some social challenges I faced were feelings of frustration due to the lack of empathy of some individuals when I was working my research. It was hard to dialogue with people who would not do anything to help. Sometimes, I felt impotence because I wanted to help much more than what I did for, but it was not possible. In terms of self-esteem, I feel like I was not being able to achieve my goal, that consisted on found resources that help me develop my research project despite how difficult it was to get the information. Last, I had some obstacles in terms of problem solving first to continue my education and then with the research that I developed.



2 weeks

The power restoration at the housing at Mayagüez took two weeks.



2 months

The power restoration at my house in Cayey, PR took 2 months.

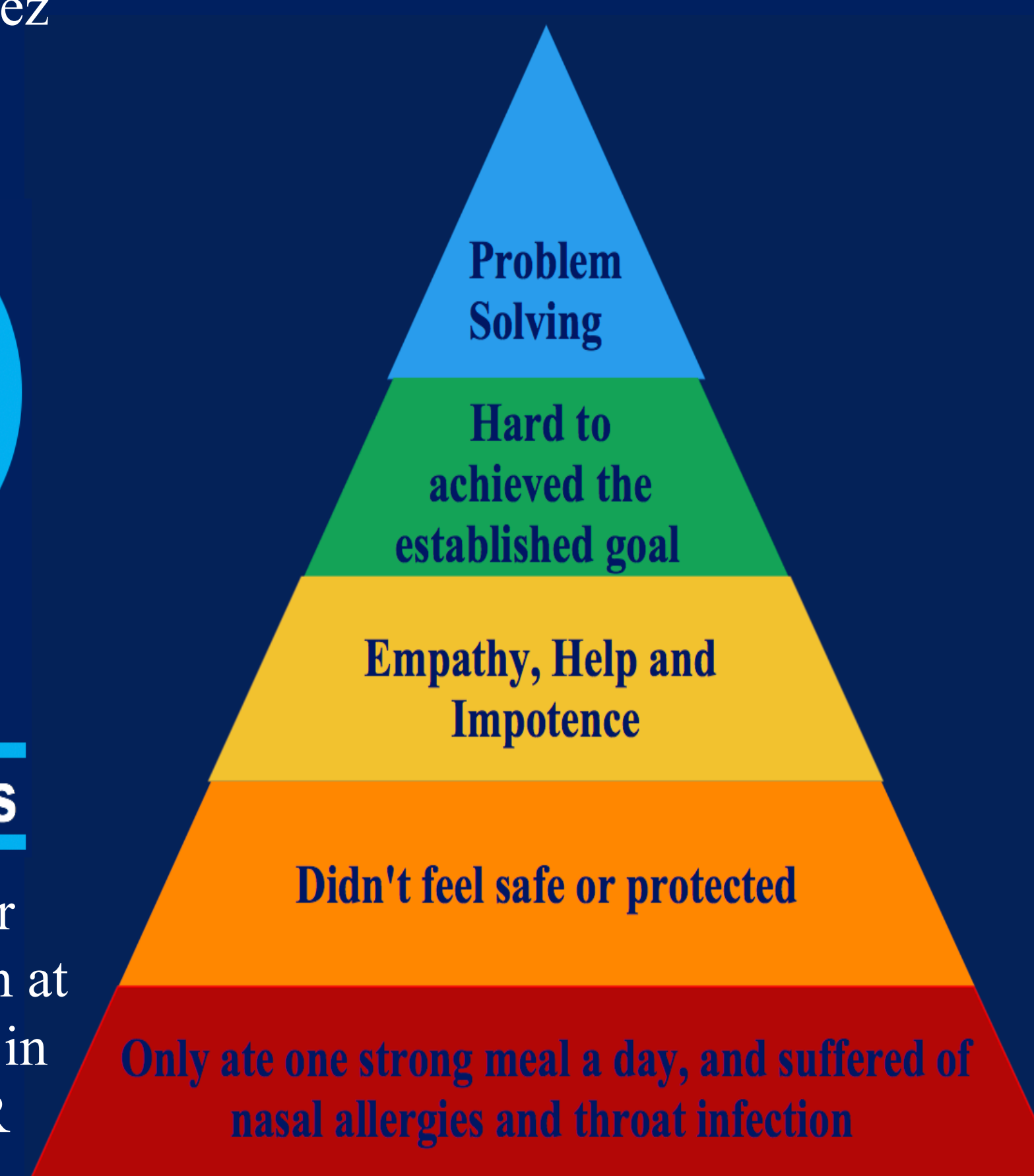


Figure 1. **Personal challenges Post-Maria**

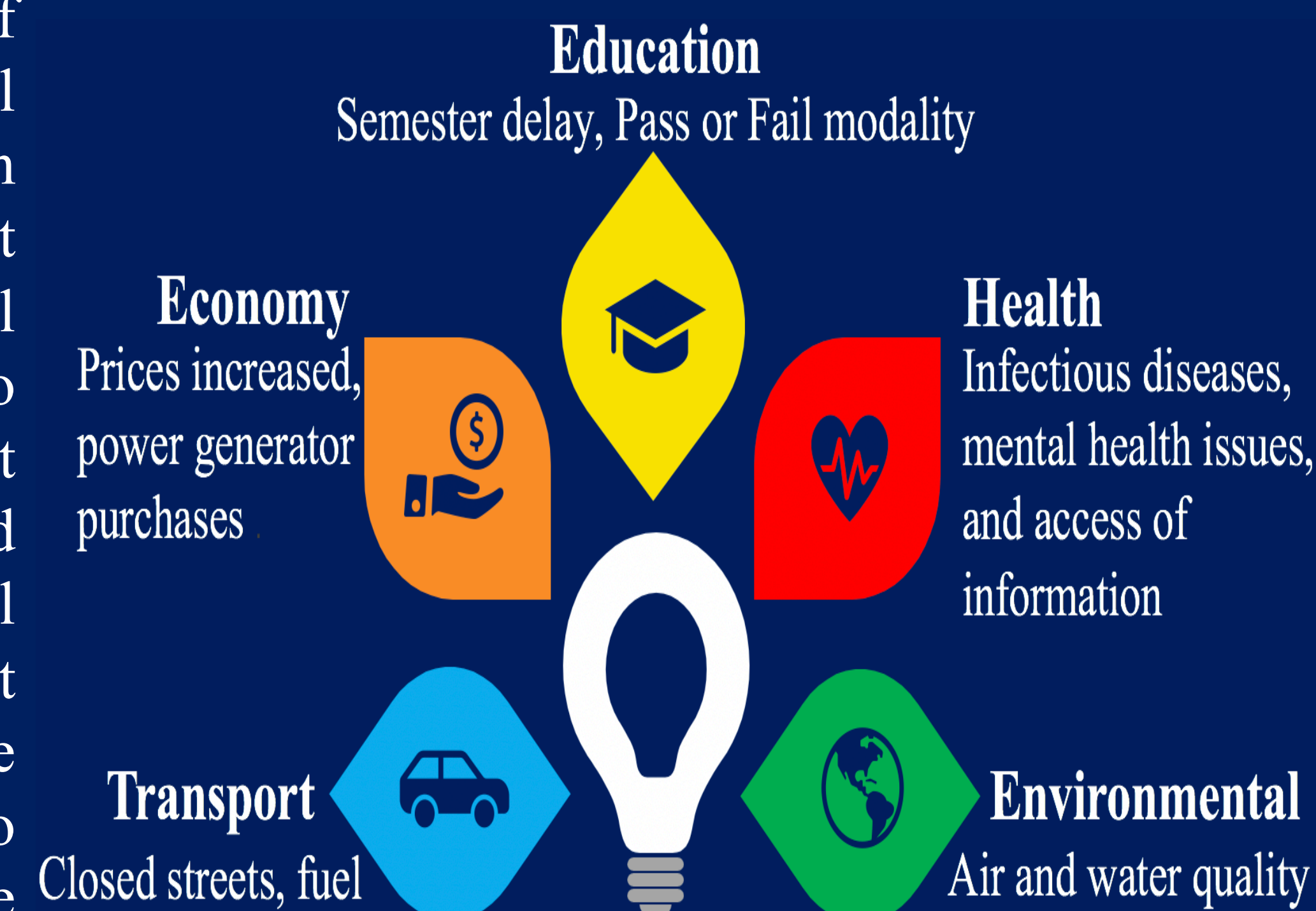


Figure 2. **Life Obstacles Post-Maria**

The lack of electricity and the collapse of telecommunications were the main obstacles during my Post-Maria experience. The fuel shortage aggravated the situation facing problems for transporting me to university and visiting hospital centers, communities, power plant suppliers and government offices in search of data. The collapse of telecommunications caused the lack of access to general and statistical information in all its modalities, which made it difficult to obtain data for research. Regarding the economic aspects, the increase in the cost of gasoline and food was a challenge to manage the personal situation, to be able to help others and carry out the research. The investigation arose when returning to the university, more than a month after the hurricane passed. The obtaining and collecting of data were complicated due to the problem with the high incidence of deaths, the affected public health of the country and the lack of statistics on deaths and health complications due to the inhalation of toxic gases. The environment and the quality of the air to which we were exposed daily and the medical and fatal consequences experienced since the Hurricane motivated me to conduct the investigation. The poor air quality could be observed and felt, as well as its effect on the health conditions associated with toxic gases resulting from the emissions released by the power plants and their noise. From this, information could be collected confirming the high demand for purchased power plants, before and after the passage of Hurricane Maria.

Benefits and Takeaways

The Post Maria Experience helped me to grow as a person due to the emotional strength, optimism, empathy and leadership that I developed in the different community service and research activities I carried out. The challenges that I set and faced, helped me to rely even more on my skills and strengths. In addition, they gave me the opportunity and confidence to contribute to society, which was gratifying. The activities of which I participated and experiences that I took, helped me to learn more about the energy, environmental and health problems that Puerto Rican society faces in the face of an atmospheric event of such magnitude. Some of the benefits that I derived from participating in the Post-Maria experience were to know how community service committees work, how to work triage, how to handle situations in moments of social despair, such as the issue of energy and gasoline, and the energy situation of the country. In addition, to know a little more in depth about public and environmental health in PR, estimated power plants purchased and the health risks to which people are most exposed when inhaling gas emissions. Having the courage to develop a research project and take leadership in certain community activities, helped me professionally by working either alone or with a group of people. Finally, making connections helped me to develop my communication skills even more, both for research purposes and to carry out the mobile clinic.

Acknowledgements

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