

Disaster Preparedness and Recovery: Literature Review

Introduction:

Heavy rains led to flooding along the Pearl River watershed damaged one of the main water treatment plants in Jackson, Mississippi. The most major consequence from this event being the inability to produce sufficient water pressure at the O.B. Curtis treatment plant, rendering local water virtually unusable. Schools were unable to function, businesses shut down, and hospitals were overwhelmed. Families no longer trust their own water and resort to using bottled water for washing, cooking, and drinking. This man-made and preventable crisis is a direct consequence of the neglect from the state of Mississippi to ensure the basic living rights of their residents. Given the rate of divestment in Jackson, rooted in systemic racism is only further enhanced by their own governmental representatives that have openly neglected the people for decades. With more than 80% of Jackson's residents being primarily Black, it only highlights the blatant environmental racism that has been occurring for so long. Using literature that focuses on other post disaster case studies highlight the underlying biases that have been perpetuated by emergency management organizations. These case studies evaluating crisis recovery strategies during Hurricane Katrina, Hurricane Sandy, Hurricane Laura, and Hurricane Maria in Puerto Rico can also provide suggestions that involve strategic planning to combat these biases in more recent post-disaster events such as the water crisis in Jackson, Mississippi.

Why Current Emergency Management Strategies are Not Working

Federal agencies such as the U.S. The Department of Housing and Urban Development, the Federal Emergency Management Agency (FEMA), and the US Department of Agriculture has implemented strategies that are not only ineffective but have shown to cause more harm to the communities they are responsible for helping. For instance, being unable to properly address the vulnerabilities of a community negatively impacted in a post-disaster event. Subjecting a community to no more than statistics and data highlights the disconnection between the community and the agency due to a lack of training and harbored ignorance of the agency. Federal agencies also would try to apply a 'one size fits all' model of their formal response and recovery effort during a post-disaster event. Lack of organization, coordination, and communication efforts have contributed to desolation from community members looking for aid through agencies such as FEMA. Relief strategies with good intentions but poor execution placed a heavier burden on impacted community members such as "... poorly thought out donations such as an excess of used clothing..." (Deitrich, 2020, 21). In another example, "One interviewee reported that it took her family months to even get a loan through FEMA; telephone agents constantly told her to call at different times or to visit other offices where she could fill out the necessary paperwork..." (Deitrich, 2020, 21). The mismanagement of recovery strategies done by federal agencies led to an overall sense of mistrust from community members, leading them to make risky decisions due to the feeling of being abandoned. The first example being communities members not following evacuation orders. For context, there were low evacuation rates during Post-Tropical Cyclone Sandy, which can be assumed due to "The lack of confidence in the government message combined with deep-rooted cultural values of the centrality of the home to individual family identity (Dietrich 2016), strongly discouraged people from obeying the evacuation order" (Deitrich, 2020, 19). There is additional skepticism towards Climate

Change and Global Warming due to the heavily politicized nature of conversations surrounding Climate Change. An environmental community educator and Staten island resident Explained that the divisiveness on the subject of Climate Change created by various media outlets makes it difficult for people to see the connection between this phenomenon and disasters such as Hurricane Sandy. Mistrust of disaster aid federal agencies and media groups leads to higher community reliance on close-knit social networks and localized mutual aid instead of federal aid due to the bureaucracy of federal aid organizations. Residents would rather form an informal economy and develop social networks amongst their neighbors instead of trusting that federal aid would provide sufficient support in a post-disaster event. An example of this would be Roishetta Ozane and the Vessel Project post-Hurricane Laura.

Occupants are required to continually show FEMA caseworkers that they need rent-free units and are making routine progress to find other housing; otherwise, they could be forced to move out. However, there are few affordable housing options available in southwest Louisiana due to the hurricanes, a winter storm, and a historic flash flooding that ruined the local housing stock. (Berlin, 2021.

Strategies and Solutions

Among recommended solutions to disaster risk and recovery strategies, the most essential concept is the construction of a culture that is conscious of disaster risk, prevention, and preparation; including providing support for marginalized communities before the ‘disaster’ event occurs. Naturally occurring events such as hurricanes, floods, and earthquakes are classified as disasters in an anthropogenic definition because of the damage they cause to society. However, without the presence of a natural disaster event, the disaster is already there waiting for a phenomenon to make underlying issues more visible to the rest of the world. Federal aid

agencies, community groups, and activist leaders have a responsibility to understand what a vulnerable community looks like and why they are more susceptible to higher damages from a natural disaster. Some factors that cause disaster in vulnerable communities include disproportionate poverty rates and an overall lower socioeconomic status, racism, and anti-blackness, and the history of colonialism in the specific region. For instance, the vulnerability of Haitians during the earthquake in the 2010s “...are the descendants of formerly enslaved people who broke the chains of chattel slavery and immediately were excluded in 1804 from the formation of the post colonial state,” (Hsu & Schuller, 2021). The discrimination rooted in colonialism impacted the Haitian victims by resulting in their neglect. Another method tying into strategies that effectively help a vulnerable group recover during a post-disaster event includes overcoming biases. Using “bottom-up” instead of “top-down” recovery strategies; “Top-down” recovery strategies fail to consider existing challenges and potentials in various locations, especially the social and historical contexts. By paying closer attention to local and historical contexts that exist among a marginalized group, emergency management agencies can better collaborate with local and well-connected community groups without reinforcing these existing inequalities and inhibit harm-causing rhetoric in the long run. These community groups, also known as CBOs are usually better equipped to communicate with impacted communities than federal agencies, as they are more likely to better know their constituents in the initial states of post-disaster response and recovery. Not only are they able to better provide accessible resources and information to impacted community members, but also are better at supporting community-driven efforts to mediate the damage that was caused. However, CBOs are usually not as specialized in disaster recovery as opposed to federal agencies such as The Red Cross and The Salvation Army. The CANAN however (culture and disaster action network), is a “...group

of ethnographically-trained researchers and practitioners...” (Deitrich, 2020, 16), with the goal to “...build and integrate cultural comprehension into the work of disaster risk and reduction and disaster recovery,” (Deitrich, 2020, 16). CANAN is responsible for working with government and nonprofit agencies to make community disaster recovery efforts more accessible to community members, and being more effective at bridging communication between the government and the community.

Conclusion (Suggestions for Water Crisis in Jackson)

The purpose of this section is to help brainstorm more solutions that either complement or add to the work that is currently being done in Jackson. Following strategies that have been used in the past, I am basing it on three core principles that serve to create organization when centralizing certain tasks and responsibilities that go to either local leaders and climate activists, as well as federal organizations. For change to occur as rapidly as possible, strategies that fall under any one of these principles need to be occurring simultaneously; however, it is going to take decades of remediation to solve a decades-long issue. These core principles include, Accountability, Transparency, and CEJ Efforts. Accountability would be the first and most attainable principle to have strategies for, since it has already been acted upon. For instance, investigation into the Mississippi Department of Health and the Mississippi Department of Environmental Quality, along with suing the state of Mississippi for their neglect of the water crisis is already occurring. Some other accountability strategies would include mobilizing campaigns to get corrupt government officials removed from office during elections, and replacing them with representatives that align with the people and are able to hold higher elected politicians at the federal level. Implementing an organization or an entity with the responsibility of water quality restoration and management, is also responsible for streamlining funds to the

counties in Jackson to ensure the proper usage of these funds and preventing more corruption from occurring. This entity would serve a similar purpose as the City Council; in order for it to be fully implemented it might take decades for such an entity to be amended and later approved by Congress. The last principle, CEJ efforts, is the longest aspect of this strategy that includes a mitigation that would need to be regularly followed up on for several decades. First, would be upgrading infrastructure so that it can properly filter water. This first step is essential for the emergency status to be removed from Jackson, which has not changed since November 2022. In addition, this infrastructure needs to be implemented with human-caused Climate Change considered; this infrastructure cannot be afforded to cause more damage that has already occurred and any risks need to be regularly monitored at all times. In addition, listing out and prioritizing counties that have been most impacted by water insecurity should be among the first to be recovered.

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