Case Study Of The 2011 Super Tornado Outbreak In The US: Framework Of Vulnerability

Natural disasters are catastrophic events that occur all over the world resulting in fatalities, property loss and social environmental disruption. Humanitarian crisis causes interference to day to day life where people who are victims are immediately flung into the act of distress due to the loss of everything where annually natural disasters kill around 90, 000 and affect up to 160 million people worldwide. In this essay, I will be discussing my case study of the 2011 Super Tornado Outbreak in the US with reference to Pelling's quote in agreement to his statement and will examine accordingly to how the focus framework of vulnerability will be relevant to the matters of fragility, political response/aid and disaster prevention.

A tornado can be known as a destructive force and violent storms that form themselves into rotating rapid columns of air violently, that extends themselves from a severe storm to the ground and can come in a range of classifications. This 2011 outbreak was one of the biggest, deadliest Tornado outbreaks ever recorded, occurring in the Southern and Eastern states of the US where there was incredible ruthless destruction in Alabama, Mississippi and surrounding states. This epidemic led to an estimate of more than 300 tornadoes that struck across 15 states resulting in 12 billion dollars in damages and the tragic lives of more than 300 people. It all began on April 25th when the storm prediction centre in Oklahoma issued their first probability warning for a severe weather outbreak for the next few days to come, and then on April 27th was recorded as one of the worst days ever where the majority of the tornadoes occurred. Unfortunately, Alabama had been hit the worst and accounted for 69 of the tornados with an EF4 where winds reached 190 miles per hour.

Pelling's idea of humanitarian disaster is significant, as this term defines it as a hazard or catastrophe that affects and impacts human beings and also devastates a community's competence to cope, leaving them vulnerable. Vulnerability is an important framework that will be discussed immensely and can be interpreted as "characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact" (Blaikie, 1942). To resolve people's vulnerability, questions such as to what threat are they vulnerable to and what makes them so fragile to that particular threat is essential. Environmental aspects of this humanitarian crisis left more than 10,000 homes completely destroyed, were victims of this catastrophe lost everything where the only thing remaining was wrecked infrastructures of houses, hospitals, communities and leftover debris. Victims are left fragile and vulnerable, and this connects them to the naturalness of this humanitarian disaster where consequently they had no electricity until a week later where people were still camping in shelters or their half-shattered homes. A vulnerability becomes a necessity in life and is the main component to the connection of humanness along with the humanitarian disaster due to the fact that disaster can be a mix of hazard and human reaction and these two are intertwined deeply to accentuate the relationship between one another.

Media coverage over this humanitarian crisis has given appeal to the nation where vulnerability in a way was able to promote aid and money for this cause. The media contributes to the discussion over how to respond and help local citizens where Bankoff quotes that "...representation through the mass media also generates a moral obligation on behalf of

Western nations to employ their good offices to ‘save’ these vulnerable populations from themselves” (Bankoff, 2001). The media also plays a governance role in shifting the mindset of humanity by making it more proactive rather than reactive and is fundamental in the promotion of a better disaster management regime and as Vasterman states “…the media played a big part in achieving legitimate demands taking into account psychological aftereffects” (Peter Vasterman, C, 2005). The 2011 humanitarian outbreak has ultimately demonstrated a collapse of authority stemming from external conflict which requires an international response that goes beyond the ability of a single agency, which has been assessed to entail intensive and extensive political and management coordination.

Through a vulnerability lense, this can be evidently presented through factors of political response, aid and disaster prevention where this humanitarian crisis has affected so many American citizens. If we examine through the issues of social aspects of this disaster, a total of more than 300 fatalities occurred leaving people who were directly involved vulnerable and fragile where most victims experienced mental triggers, anxiety and PTSD etc along with physical body impacts such as amputations, fractures or cuts. For victims who were indirectly involved, they are just as vulnerable because they usually are relatives and friends of loved ones where grief can be a vast setback to their lives. “Disaster often used to be seen as an abnormality or an aberration from a linear path of progress rather than perhaps a chronic condition as much caused by development as impinging on it.” (Wisner et al (2004: 20)

Consequently, the following day the governor of Alabama announced a state of emergency on 27th April due to flooding and tornadoes that had already destroyed many homes and communities. Following this outbreak, vulnerability began to display from victims who had lost their homes and communities, former President Obama visited areas that had been deeply affected and approved a federal disaster declaration for the state of Alabama with federal assistance, including 2000 troops for search and rescue teams. By then, the environmental impact had already turned into nationwide devastation with over 12 billion dollars’ worth of damage already done as an economical aspect, where homes, factories, power etc have been lost completely. Sometimes in the aftermaths of catastrophes, it is the disaster that connects us with one another where we all unite as a joint community to help one another and I believe this is one of the ideas Pelling is trying to reinforce.

Environmental impact can be defined as effects caused by a release of a substance in the environment where there is evidence of dramatic changes such as how more than 10% of the city of Tuscaloosa was destroyed completely including emergency buildings. “Disaster are inherently social phenomena; it is not the tornado or storm that makes the disaster; these are the source of damage” (Perry 2007, p.12). There were also disaster relief agencies that accepted donations to provide shelter and food such as American Red Cross and Salvation Army. Disasters do not only have an effect on the environment but can also strain and threaten survival of social and political systems. Vulnerability can be dealt with by accumulating the social capital of neighbourhoods and communities which are located in areas of amplified risk of humanitarian phenomena. Visibility is another idea under vulnerability which comes into play where media coverage of disasters can have the power and control to help relay the importance of responsibility in a community where Pantti suggest this through her quote that “Thompson reflects on how various media of communication ‘have helped to create sense of responsibility which is not restricted to localized communities, but which is shared on a much wider scale” (Pantti, 2013).

Relating back to Pelling's statement I do believe Kirschke's idea that "..human and natural aspects of disasters are intertwined, causing particular, unpredictable, and complex types of disasters" (Kirschke & Newig, 2017) where Kirschke denotes the fact that disaster is indeed a human and hazard reaction, establishes how we (in reference to us and the humanitarian disaster), are all connected and linked in our society through the concept of vulnerability. Disaster Prevention and mitigation policies work towards reducing the economic and social costs to communities over time, reducing the impact and destruction to the environment. "Moreover, the intertwined social and natural mechanisms that trigger disasters have a direct influence on the institutional and political responses to disasters" (Blackburn, 2018). Warnings were broadcasted during the day of this outbreak where preparations were in place except the problem lied with how it was difficult to move thousands of people all at once, where the average warning time was 13 minutes. As evacuations were not possible, search and rescue, and recovering become that much more urgent and critical.

In conclusion through my case study of the 2011 Super Tornado outbreak, I am in agreement with Pelling's statement that with a natural trigger, natural disasters can be identified as humanitarian disasters through the framework of vulnerability, and how that has demonstrated the connection between humans and the naturalness of the disaster hence, a tornado. Through the subject matters of being vulnerable/fragile, the use of political aid and response along with disaster prevention/management, both terms can be intertwined where humanitarian disaster will forever have impact on individual coping patterns due to the fact that catastrophes have affected human beings through the input and outputs of a social system which overwhelms their community's ability to cope leaving them vulnerable.

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