

# Case-in-point analysis

Literature, Russian Literature



Hurricane Katrina of Institute Hurricane Katrina Introduction In 2005, one of the deadliest and devastating hurricanes hit the American Gulf Coast causing immeasurable damage to the New Orleans city and the surrounding coastal cities. Property of large value was severely damaged and thousands of lives claimed. Many other people were evacuated from their homes and rendered destitute. Scientists believe that the hurricane was caused by global warming which emanated from human activities. According to them, “Humans...altered the geography and geology of the New Orleans areas in ways that...impaired a balanced natural system and exacerbated the storm damage,” (Raven, Berg and Hassenzahl, 2009). We are going to see how these human activities worked to result into the storm. Human Activities Research discovered that the hurricane was caused by temperature rises and that this global warming is directly related to human activities. This was facilitated by the fact that the situation of New Orleans makes it attractive for industry activities and sea and river commerce causing the city to develop at a high rate. This development has in consequence “disrupted the delta building processes,” (Raven et al, 2009) of the Mississippi River which has been forming over many years “from sediments deposited at the mouth of the river,” (Raven et al, 2009). Also, engineers have been constructing navigational canal systems and levees over the years, aimed at controlling flooding of the city which is below sea level. These canals caused salt water to interfere with and death of the growing fresh water marsh vegetation while the levees impeded the deposition of sediments which form themselves after floodwaters subside. Without this interference, these sediments naturally replenish and keep the delta intact which builds up

coastal wetlands. Due to the growth of the city, individuals settled on the delta wetlands which had been drained and filled in. these wetlands were responsible for protecting the city against flooding caused by storm surges and their remaining intact was therefore very important. “ Had these wetlands been largely unaltered, they would have moderated the damage by absorbing much of the water from the storm surge,” (Raven et al, 2009). Further, the disaster was aggravated by the fact that for many years, the city had been subsiding majorly because the city is built on unconsolidated sediments. It has been argued that the subsidence was caused by extraction of underground natural resources which the city is richly endowed with such as natural gas, oil and groundwater. The extraction of these resources makes the land to compress, lowering the city. Report shows that “ New Orleans and nearby coastal areas are subsiding an average of 11mm each year,” (Raven et al, 2009) while the sea level continues to rise at around 1-2. 5mm per year attributed to changes in climate caused by human activities. How the Catastrophe could have been Prevented Even though it is hard to prevent a hurricane there were some measures open to the Americans, both scientific and social, to mitigate the effects of the catastrophe. First of all, the government should have heeded to scientific studies already done to construct proper levees and floodwalls. These studies indicated that the levees and floodwalls of the Mississippi River were not strong enough to prevent overtopping in extreme events. The studies also showed that the engineering mechanisms of the navigational canal system were a failure. Proper levees and floodwalls would have largely reduced the risk of damage caused by the hurricane and storm surges. Flood-proofing measures should

also have been taken on structures situated in hazardous areas for example the elevation of buildings in the region to a higher flood level. Further, they should come up with a plan to rebuild the wetlands. Wetlands are capable of absorbing storm surges at a rate of 1 ft per 2.7 miles. The government also lacked a proper disaster management plan in place that would have been used to ensure the safety of residents in the area. There were not enough relief supplies or crowd control measures. Had there been state plans, helicopters of heavy lift capacity should have been provided to rescue lives. The federal government delayed in acting and it was only people of goodwill who arose to the occasion on time. The government only intervened five days later. This was coupled by the fact that the relief personnel were unable to go through the underwater areas for lack of better facilities. This is where the government should have stepped in. Conclusion In this era, human activities have resulted to several environmental issues which end up in massive destruction of property and loss of lives. The Hurricane Katrina is one of these disasters that were directly caused by human activities. The human population should use the available scientific and technological methods available to prevent such occurrences. If proper plans had been formulated, the destruction caused by Hurricane Katrina would have been greatly minimized. References Raven, H., Berg, R. & Hassenzahl (2009). "Environment: Internal Planetary Processes" 7th Edition, Ch. 5. ISBN 20111122134434.