

Natural Disasters and Preparedness

(1) Introduction:

(a) Hook: Pakistan has been hit by widespread flooding between June and September 2025, affecting over 33 million peoples and causing significant damage to infrastructure and agriculture. While this event, characterized by unprecedented monsoons, rains, landslides, cloudbursts, glacial lake outbursts and resulted in a severe humanitarian crises.

(b) Thesis Statement: While natural disasters are inevitable, the persistent catastrophic loss of life and property demonstrates that Pakistan's current disaster preparedness strategy remains critically insufficient, requiring a current comprehensive overhaul focussed on strengthening institutional accountability, modernizing infrastructure, and moving from a proactive relief model to proactive framework.

(2) Plans and Preparedness for disaster management:

(a) National Five-Year Plan:

(b) Ten-Year Perspective Development Plan (2011-2021):

→ Establishment of National Disaster Management Authority (NDMA) and State Management Authority.

(c) Water Resources Development Plan:

→ Dam Management, early flood warning system, and rain water harvesting initiatives.

(3) Critical Gaps in Current Management (Why are we not prepared today?)

(i) Ineffective Institutions and Bad Governance

(a) Lack of Accountability:

Failure to enforce preparedness protocols and punish negligence at NDMA/SDMA level.

(b) Poor Coordination: Lack of synchronization between central, state, district, and local agencies during a disaster.

(c) Bureaucratic Red Tape: Delays in fund disbursement and implementations of mitigation

projects.

(ii) Feasible Infrastructure and Lack of Fortification:

(a) Substandard Constructions:
Non-adherence to resilient building, especially in urban areas.

(b) Critical Infrastructure Failure: Vulnerability of power grids, communication networks

(iii) Lack of Training and Public Awareness:

(a) Insufficient Capacity Building:
Poor quality and limited reach of training programs.

(b) Poor Public Education: Failure to instill a culture and mandatory individual preparedness.

(iv) Absence of Technology and Machinery:

(a) Outdated Equipment:
Reliance on old or outdated and insufficient rescue and relief machinery.

(b) Inadequate Monitoring System:
Need for greater investment in meteorological forecasting technology.

(v) Chronic Lack of Funding:

(a) Disparity in Allocation:
Inadequate funds dedicated to prevention and mitigation.

(b) Mismanagement of Funds:
Leakages and insufficient techniques in utilizing sanctioned disaster funds.

(4) Proactive Resilience (Recommendations)

(a) Strengthen Legal and Institutional Frameworks: Establish clear, mandatory accountability mechanism for planning.

(b) Mandate Infrastructure Modernization: Prioritize investment in disaster affected infrastructure.

(c) Foster Community-Level Resilience: Empower and fund local self governance bodies (Municipalities) to create a local disaster plan.

(d) Leverage Technology and data:

(5) Conclusion:

Essay:

"We can not stop natural disasters, but we can arm ourselves with knowledge: so many lives would not have to be lost if there was enough disaster preparedness."

Pakistan is one of the most disaster-prone countries in the world and is facing many disasters. A disaster is a sudden adverse or unfortunate extreme event, either natural or man-made, that exceeds the tolerable magnitude within or beyond certain time limits. There are large scale meteorological events that cause many life threatening accidents. Such as hurricanes, unprecedented monsoon rains, cloud bursts, wildfire, urban flooding, earthquakes, and droughts. Pakistan continues to suffer from plethora of natural and human induced disasters as Pakistan is not fully prepared to counter it.

In many ways, from 1958, The west Pakistan National Calamities Act and Civil Defence Act were passed and Pakistan

improved its capacity to deal with disasters. ~~After~~ Around 2005 earthquake, the disaster management function was not formally located, the Emergency Relief cell in the Federal Cabinet secretariat led coordination efforts but locally sourced disaster by individuals. The earthquake of 2005 was the catalyst that resulted in the creation of the Earthquake Reconstruction and Rehabilitation Authority (ERRA). However, it was only in 2010, when a large part of country were flooded, then the government took the next major step and created National Disaster Management Act. These are some steps that Pakistan has taken in the past. However, the question arises that why have failed those plans? And why are we not prepared today to manage disasters?

Firstly, Pakistan's institutions are ineffective. Earlier in 2018, a Pakistani professor named Farakh A. Khan issued a dire warning about the State of Pakistan's institutions. Where he said, "Pakistan suffers from ineffective institutions ability. Failed institutions are unable to correct

the problems faced by society, which eventually leads to economic failure." Today, Pakistan's most institutions of governance remains poor. According to World Bank's report, based on data from 2020, Pakistan is in the 29th percentile for government effectiveness. The five men waited for over three hours to be rescued. But no help was forthcoming, despite multiple calls made by various individuals to their local administration. Eventually, to the horror of those assembled, four of the five were simply washed away by the swelling torrents. If they were effective institutions, torrents in the Dubair stream near Saragis in Lower Kohistan never exist.