

Disaster Management in Pakistan: Challenges and Way Forward

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In June 2025, when the swollen rivers of Punjab breached their banks, Pakistan found itself again under the deluge of a disaster that left millions displaced and billions of damages. The cries of hungry children and the pleads of women and poor farmers tell us ~~the~~ how successful Pakistan is when it comes to Disaster management. Disasters have always tested the resilience of nations, but in Pakistan's case, they repeatedly expose the deep cracks in the system. While Pakistan has built up institutional frameworks such as NDMA and PDMA, deep-rooted challenges, weak capacity, inadequate infrastructure, climate-driven hazards continue to hamper effective disaster management. The recent 2025 floods crystallize these issues and underscore the urgent need of Pakistan to shift from relief-based response to an integrated, technology-enabled, and politically supported resilience model.

To minimize the hazards it is important to first understand the spectrum of Disaster Management. It is the systematic approach of activities that are taken before, during and after a hazardous event. It involves identifying risks, strengthening early warning systems, educate communities, coordinating institutions, and rebuilding the damages once the disaster strikes.

The approach of post-disaster relief is now globally evolved to Disaster Risk Reduction (DRR) emphasizing on prevention and resilience. Frameworks like

Hyogo Framework for Action (2005-2015) and the Sendai Framework (2015-2030) have guided global efforts to reduce vulnerability and build capacity against disasters. Pakistan being signatory to these international conventions, has adopted similar principles, but the implementation gap remains wide.

In Pakistan's context, disaster management includes a mix of natural hazards like earthquakes, floods, droughts, cyclones, and man-made crises like industrial fires, transport accidents, and terrorism. Therefore, effective management demands coordination among federal, provincial, and local authorities, backed by science and technology, and strong public participation.

Pakistan is situated at the crossroads of tectonic plates, monsoon rivers, glacial melts and rapid urbanisation, which makes Pakistan one of the most vulnerable countries to natural disasters. The 2005 Earthquake in northern Pakistan is one of them, which killed over 80,000 people, flattened cities like Muzaffarabad, and left millions homeless. The tragedy prompted the creation of the Earthquake Reconstruction and Rehabilitation Authority (ERRA), and later, the National Disaster Management Authority (NDMA).

Then came the 2010 super floods, which inundated one-fifth of the country, affecting around 20 million people and causing over

~~\$10 billion in damages. Despite massive relief efforts, the event underscored poor coordination between federal and provincial institutions.~~

Again, In 2022, Pakistan faced one of the worst climate-induced disasters in modern history. Heavy rains, glacial melts, and inadequate drainage systems led to unprecedented flooding, displacing 33 million people. The losses exceeded \$30 billion, while the government's response was marred by bureaucratic delays and resource shortages.

Recently, in 2025, the floods have added fresh urgency to the issue. According to the reports, as of mid of September 2025, the death toll exceeded 1000, with over 1000 injured and millions left homeless and displaced. More than 2.2 million acres of farmland in Punjab was badly affected with key crops like rice, sugarcane, cotton etc leaving heavy economic losses. Meanwhile, northern Pakistan faced cloudbursts and Glacial-Lake Outburst Floods (GLOFs) which destroyed houses, washed out infrastructures and triggered landslides. In Sindh, evacuation of more than 100,000 people was undertaken at the low-lying areas of the Indus River.

To administer the issues, Pakistan formalized its institutional Framework for Disaster Management after 2005 earthquake through the National Disaster Management Act 2010. This law

established ; National Disaster Management Commission (NDMC): The policy making body, National Disaster Management Authority (NDMA): responsible for coordination and implementation at the national level (federal), Provincial Disaster Management Authority (PDMA): operating at each province.

~~District Disaster Management Units (DDMUs)~~: functioning at local level.

Along with the architectural bodies several policies are made such as the policy documents of National Disaster Risk Reduction Policy (2013) and the National Climate Change Policy (2021) ; further emphasize risk reduction and resilience. The armed forces and local NGOs, and international organizations like UNDP and UNICEF play critical role during emergencies.

In reference to the continuous failure ~~we~~ can determine the major challenges observed while the rescue and prevention stages. Among which, weak institutional capacity and poor Preparedness is the most highlighted one. NDMA and PDMA often lack trained personnel, modern equipment, and data systems. The early warning systems are outdated and centralized. Flood forecasting and weather modeling remain inefficient. The dependence of the institutes on the donor funding limits autonomy and rapid decision making. At the district level, disaster cells exist largely in name only.

Not only the institutions, but climate is also cruel to Pakistan. Climate Change and Environmental Degradation are also noticeable reasons of frequent damages. Pakistan ranks among the top ten countries most affected by climate change. GLOFs, heatwaves, and droughts are becoming more frequent. Yet, environmental mismanagement like deforestation, poor water storage models, and over extraction magnify these threats.

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The rural areas of Pakistan are affected first, still the authorities have not planned for a better infrastructure for them. Not only the authorities but to some extent people also lack awareness to take measures while selecting land and often end up choosing the most flood prone lands. Along with rural areas, Urban areas also face poor planning, inadequate drainage systems and damaged roads which get worsen when floods strike. Big cities also lack smart buildings and well equipped disaster resistant bodies.

This lack of advancement is because of Pakistan's limited resources and financial constraints. Disaster Management receives limited annual funds. Most allocations are consumed by relief instead of prevention.

Another challenge is that, disaster management is often politicized. Relief goods distribution, appointment of officials, and project

funding become politicized rather than need based. Coordination between federal and provincial governments often collapses during emergencies, leading to delays.

The challenges have strong impacts on different levels. Thousands lose their lives or homes every year due to major or minor disasters. Psychological trauma, malnutrition, and disease outbreaks often follow disasters. In such critical times social vulnerabilities are also seen. Poor communities suffer more, fueling frustration and distrust in the state institutions.

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These impacts are also seen on many other factors like economy. Disasters share of percentage of GDP. The agricultural sector which is the backbone of Pakistan is affected the most every year. Soil erosion, deforestation, and water contamination worsen and long-term losses on economy and environment are caused.

To resist against such hazards, the world offers numerous examples of effective disaster management that Pakistan can learn from. Japan being a land with most earthquakes, shows its efforts of preparedness. Bangladesh has also introduced women-led early warning networks which have helped a lot. Indonesia built decentralized response system that avoided delays.

Turkey has also established legal reforms and rapid response systems.

To transform its disaster management plz write more comprehensive Pakistan needs to better reforms to resist future calamities. This can be done through strengthening institutional frameworks by granting them administrative autonomy. Regular trainings and dedicated fundings must be provided.

In addition, Disaster management cannot be separated from climate adaptation. A unified National Resilience Strategy must be built ensuring long-term sustainability.

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Another practice can be enforcing earthquake resistant building code, rehabilitation of drainage systems and relocation of settlements. Also, rural areas need more attention in this regard.

To support all these developments a National Disaster Insurance Fund should be made to compensate the victims swiftly. Encourage private sector investments and preparedness projects.

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