

Natural Disasters In Pakistan: Causes And Consequences

Outline

1. Introduction

2. Causes of natural disasters in Pakistan

2.1. Geographical and Climate Factors

2.1.1. Location between Himalayan glaciers and Monsoon belt.

2.1.2. 1000+ glaciers in GB and Chitral → GLOFs

2.1.3. Case Study: 2005 Kashmir earthquake (80000 deaths)

2.1.4. Natural exposure is inevitable, but lack of resilience planning turns hazards into disasters.

2.2. Deforestation and Environmental Degradation

2.2.1. Forests cover only 5% in Pakistan

2.2.2. Landslides in KP due to illegal logging.

2.2.3. 2010 Attabad Lake landslide disaster.

2.2.4. Weak forest protection erode natural buffers against flood and landslides.

2.3. Unplanned Urbanization

- 2.3.1. Rapid unchecked housing schemes encroach on natural waterways.
- 2.3.2. 2025 Lahore flood (Parkview, Shahdara) housing societies built on floodplains submerged after heavy monsoon, displacing citizens.
- 2.3.3. Karachi also faced paralyzing rainfall.
- 2.3.4. Unregulated urban expansion magnifies rains into urban disasters.

2.4. Poor Infrastructure and Building Codes

- 2.4.1. Unsafe construction in seismic zones
- 2.4.2. Rural mud houses collapse in flood/earthquakes.
- 2.4.3. 2005 earthquake massive death toll due to poor infrastructure schools/homes
- 2.4.4. Weak enforcement of safety standards multiplies human casualties.

2.5. Weak Institution and Governance failures

2.5.1. NDMA reactive but not preventive

2.5.2. NCCP 2012 largely unimplemented

2.5.3. Case Studies

- 1. NCCP 2012 largely unimplemented, climate adaptation plans gather dust.
- 2022 flood, delayed coordination between NDMA, provinces, and army worsened rescue efforts.
- Swat incident an entire family was swept away by floodwaters after local authorities ignored early warnings and failed to enforce safety evacuations.

2.5.4. Institutional negligence and policy paralysis convert natural hazards into human catastrophes.

3. Consequences of Natural Disasters in Pakistan

3.1. Human losses

3.1.1. 2005 quake: 80,000 dead

3.1.2. 2025 Punjab, KP and GB floods hundreds dead thousands displaced.

3.1.3. Human survival remains the first casualty of unpreparedness.

3.2. Economic Damages

3.2.1. 2022 flood: US\$ 30 - 40 Bn losses

GDP growth down from 6.1% to 2.1%

3.2.2. Disasters wipe out decades of economic progress.

3.3. Food and water insecurity

3.3.1. Crops destroyed (Sindh rice/sugarcane in 2022)

3.3.2. PES 2024-25: per capita water availability at 850 m³.

3.3.3. Natural shocks today threaten food security tomorrow.

3.4. Public Health Crisis

3.4.1. Flood spread Cholera and Dengue (Rawalpindi 2025)

3.4.2. Lahore smog (2024) → respiratory diseases.

3.4.3. Climate disasters create silent epidemics alongside visible destruction.

3.5. Social Displacement and Political Strain

3.5.1. 2025 flood in KP forced thousands into temporary camps, straining local resources.

3.5.2. Similarly, 2022 floods displaced over 8 million people nationwide.

3.5.3. Disasters destabilize society and strain governance.

3.6. Environmental Degradation

3.6.1. Mangrove loss in Indus Delta (86% since 1945)

3.6.2. Erosion of wetlands, biodiversity decline.

3.6.3. Damaged ecosystem reduces natural defense against future disasters.

4. Conclusion

- 4.1. Disasters are inevitable, devastation is preventable.
- 4.2. Geography puts Pakistan at risk, but governance and policy failures magnify impacts.
- 4.3. By strengthening institutions, enforcing building codes, and adopting climate smart planning Pakistan can convert disasters into lessons for resilience.

Introduction

Natural disasters remind humanity of its fragility. Man, who dreams of conquering the universe, is reduced to a mere straw when faced with earthquakes, floods, or storms. Few experiences capture helplessness more than standing before nature's fury. Pakistan has lived this reality repeatedly.

On October 8, 2005, an earthquake in Kashmir killed over 80,000 people and exposed the state's unpreparedness. In 2022, abnormal monsoon rains submerged one-third of the country, displacing 33 million

people and inflicting unbearable losses. These events reveal that while disasters cannot be prevented, their devastation is shaped by governance and its readiness. Recent reports reinforce this vulnerability.

The Germanwatch Climate Risk Index 2025 again placed Pakistan among the ten most disaster-prone states, while the Pakistan Economic Survey 2024-25 warned that abnormal rainfall and glacier melt are intensifying floods, droughts, and landslides.

Therefore, Pakistan's geography makes it disaster-prone but deforestation, unplanned urbanization and weak institutional institutions convert natural hazards into national crisis. Unless strong structural reforms are undertaken, natural calamities will

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continue to derail human security and
national development.