Islamic Republic of Pakistan

1. General information

   **Location:**
   Southern Asia, bordering the Arabian Sea, between India on the east and Iran and Afghanistan on the west and China in the north S

   **Geographic coordinates:** 30 00 N, 70 00 E

   **Map references:** Asia

   **Area:**
   total: 803,940 sq km
   land: 778,720 sq km
   water: 25,220 sq km

   **Area - comparative:** slightly less than twice the size of California

   **Land boundaries:**
   total: 6,774 km
   border countries: Afghanistan 2,430 km, China 523 km, India 2,912 km, Iran 909 km

   **Coastline:** 1,046 km

   **Maritime claims:** territorial sea: 12 nm
   contiguous zone: 24 nm
   exclusive economic zone: 200 nm
   continental shelf: 200 nm or to the edge of the continental margin

   **Climate:** mostly hot, dry desert; temperate in northwest; arctic in north

   **Terrain:** flat Indus plain in east; mountains in north and northwest; Balochistan plateau in west

2. Natural hazards in Pakistan

   **High Altitudes areas**

   Land Slides/Toppling/Avalanche
   Land Erosion
   Avalanche
   Earth quakes
Low Altitudes areas

Floods
Land Slides
Land Erosion
Forest Fire
Seismic Activities

Natural Hazards likely to affect the country

In Pakistan the primary hazards are hydro climatic hazards, landslides/ toppling’/avalanches and flash floods. Secondary/ Consequential Hazards and Tertiary Hazards are rainfall catchments bursts/ re-routing, communication & energy link disruptions and epidemics & potential out break while tertiary hazards are distortion of habitats and socio economic vulnerabilities.

Geographically Pakistan is divided in to high altitudes and low altitudes. The high altitudes are prone to seismic activities and above mentioned primary hazards while in low altitudes floods have repeatedly affected to vast areas of this country.

Major disasters in Pakistan;

Pakistan is disaster prone to several natural Hazards. There is serious threat of Earth quakes and Land Slides in the northern part of this country while downstream is prone to Tsunami, floods and droughts. A brief detail of these hazards is as follows;

Pakistan lies in active seismic belt and suffers from frequent Earthquakes of varying magnitudes. In 1935, there was a major Earthquake of 7.5 magnitudes in Quetta Baluchistan. Almost 35000 individuals were died while the entire city raised to the ground. From 1974 to1990, more than 5500 people lost their lives in Northern Areas in result of Earthquake.

Devastating earthquake of 2005 is an example where losses of life and property, were of such colossal magnitude that it was recorded one of the worst calamities in the history. Deaths counted more than 73000 people during this Earthquake. The approximate economic loss of Public and private sector was more than 125 billion Pakistani rupees. This single disaster wipes out annual GDP of our country. If there was second wave of deaths from cold or hunger and if epidemic or disease out broken, it was beyond our control. There was another earth quake in
2008 at Baluchistan. A brief detail of some disasters occurred in Pakistan are as under.

<table>
<thead>
<tr>
<th>Year</th>
<th>Nature of disaster</th>
<th>deaths</th>
<th>pop effected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1935</td>
<td>Baluchistan earth quake</td>
<td>52,000</td>
<td>4.00 million</td>
</tr>
<tr>
<td>1945</td>
<td>Tsunami in Pasni</td>
<td>4,000</td>
<td>not reported</td>
</tr>
<tr>
<td>1950</td>
<td>flood</td>
<td>2,190</td>
<td>do</td>
</tr>
<tr>
<td>1974</td>
<td>Northern areas EQ</td>
<td>5,200</td>
<td>2.00 million</td>
</tr>
<tr>
<td>1975</td>
<td>Northern areas EQ</td>
<td>4,000</td>
<td>2.00 million</td>
</tr>
<tr>
<td>1992</td>
<td>floods</td>
<td>1,008</td>
<td>3.50 million</td>
</tr>
<tr>
<td>2005</td>
<td>great Pakistan EQ</td>
<td>73,000</td>
<td>3.50 million</td>
</tr>
<tr>
<td>2008</td>
<td>Baluchistan EQ</td>
<td>385</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Disaster Management system

Administrative System

Like Japan, Pakistan has also three administrative level of governance; National Disaster Management Authority as focal point on federal level, the provincial Disaster Management Authority (PDMA) is the focal point for DRM endeavors in respective provinces and District Disaster Management Authority (DDMA) on the district levels. If disaster occurs, DDMA will be the first responder for rescue and if needed the disaster may be focused on provincial or national level. National Disaster Management Commission (NDMC) headed by prime minister has been established for the formulation of over policies on national level while on provincial level Provincial Disaster management Commission (PDMC) headed by the chief minister of respective province will act as chairman. The lower tear in disaster management system in Pakistan is DDMA which is headed by the deputy commissioner of respective districts.

NDMA would provide technical guidance to national and provincial stakeholders about formulation of plans, strategies and program for disaster risk management. NDMC will formulate the policies and decisions on advice of NDMA. Chairman / director general NDMA will act as secretary of the commission at federal level while director general PDMA will perform his duties as secretary on provincial level. The stake holders for execution of pre disaster activities and post disaster snario will be the district administration with the help of civil defense department and other member departments, NGOs and IOs.
National Disaster Management Commission (NDMC)

Composition

Prime Minister is the ex-officio Chairman.
The members include leaders of the opposition in Senate and National Assembly, Federal Ministers for Defense, Health, Foreign Affairs, Social welfare & Special Education, communication, Finance and Interior.

Membership also includes Governor NWFP (for FATA), Chief Ministers of four Provinces, Prime Minister of AJ&K, Chief Executive of NAs, Chairman JCSC, and representatives of civil society or any other person appointed by the Prime Minister.
The Director General / Chairman of the NDMA acts as ex-officio Secretary of the commission.

OPERATIVE FRAMEWORK

Legal system and Framework

National disaster Management Ordinance promulgated in 2006. Implementation of the ordinance would be ensured by NDMC. In terms of section 9 of the national Disaster Management Ordinance 2006, the National Disaster Management Authority (NDMA) shall serve as the focal point and coordinating body for the execution of the whole spectrum of disaster management activities. All stakeholders including government bodies, agencies at the federal as well as provincial level, armed forces, UN agencies, international organizations and NGOs shall work through the NDMA in all stages of disaster management.

Periodic legislation

1- The national calamities (prevention & relief) act 1958.
3- Emergency service ordinance 2002.

**Supplementary Laws**
1- Pakistan environmental act 1997
2- AJ&K environmental act 1995
3- Karachi port trust ordinance 1994

**National Organization for DRR**
**Organizations with Disaster related Responsibilities;**

Emergency Relief Cell (ERC)
Meteorological Department
Federal Flood Commission
National Crisis Management Cell (NCMC)
Civil Defense
Provincial relief Departments
Provincial Health Departments
Provincial Agriculture & Live Stock Departments
Provincial Flood Departments
Provincial Communication & Works Departments
Provincial Planning & Development Departments
Army Police Dams Safety Council Space & Upper Atmosphere research Council (SUPARCO)
Progress of Implementation of HYOGO FRAMEWORK FOR ACTION:
Pakistan has prioritized its line of action as following;

- Make disaster risk reduction a priority
- Know the risk and take action
- Build understanding and awareness
- Reduce risk
- Preparedness for active action

Make Disaster Risk reduction a Priority:
Gravity of the disaster and future risks compelled the policy makers for adoption of a comprehensive policy based on disaster risk assessment for reduction & mitigation of disasters instead of relief oriented activities. Realizing the importance of disaster risk management for sustainable social, economic and environmental development, the government of Pakistan has embarked upon establishing appropriate policy, legal and institutional arrangements at federal as well as provincial levels, to minimize risks and vulnerabilities.

Know the Risks and take Action:
Pakistan has top priority for floods, earth quakes, landslides, flash floods, infection disease and epidemics. The medium term priority is for transport and industrial accidents while drought, forest fire and urban fires are on low priority.

Build Understanding and Awareness:
Medium term public awareness strategy has been adopted for multiple sectors; e.g. civil servants, staff of technical agencies, NGOs, media, politically effective people and communities themselves. Orientation about disaster risks and vulnerabilities, skill development on risk management, risk assessment, vulnerability reduction, hazard mitigation and emergency response management is initiated in light of HFA. Specialized training in the areas of response also being envisaged; e.g. search & rescue, first aid, fire fighting, evacuation, camp management and relief distribution. NDMA is establishing partnership with electronic and print media and develop awareness of media personnel. The program implemented at community and local level is at the heart of disaster risk reduction strategies.

Reduce Risk:
Risk reduction envisages strategies and plans are prepared to check occurrence and likely damage by both natural and manmade disasters. In the case of natural disasters the option is limited to taking precautionary measures like adoption of earthquake resistant designs for buildings, ensuring stability of slopes to reduce landslides and avalanches, plantation to prevent soil erosion. Manmade disasters like fires and blow outs, collapse of buildings and bridges, road accidents etc, require a well designed and implemented legal framework to ensure that the risk to life, property and infrastructure is minimized.

Preparedness for Active Action:
Keeping in view inability of the existing emergency response system in case of a catastrophe, NDMA is formed and assigned with the task to develop an organized effective disaster response system at national, provincial and district levels. This would imply development of institutional mechanism and technical and operational capacity of involved agencies. Revamping of Civil Defense Departments at federal as well provincial levels would be critical. In addition other departments that need strengthening include the ERC, PRCs, Police, Fire Sighting Services, municipalities, ministries for interior & health along with the other line departments. These
forums need to be strengthened for collaboration between armed forces and above mentioned agencies.

Efforts Underway to implement HFA;
Emergency Operation Centers (EOC) are being established at national, Provincial and District Levels under the overall supervision of NDMA, PDMAs respectively. The EOC would lead coordination and management of relief operations in affected areas. Civil Defense, armed forces, NCMC, fire services, police, ambulance services, Red Crescent Society, Edhi Foundation and other concerned agencies will be coordinated by the EOC at respective levels. Standing Operating Procedures (SOPs) are being drafted, which would define roles of federal, provincial and local agencies for their involvement in emergency response.

Disaster Risk Reduction PROCESS