

PAKISTAN

I. Natural hazards in Pakistan

1.1 Natural hazards likely to affect the country

Earthquake, flood, drought, epidemic, extreme temperature, famines, slides

1.2 Recent major disasters

year	dis_type	killed	injured	total_affected	dam (US '000s)
2004	Earthquake	24	63	13148	—
2005	Earthquake	73320	69392	3269392	5000000
2004	Epidemic	2	100	100	—
2005	Extreme Temperature	106	200	200	—
2005	Flood	520	450	7000450	—
2005	Flood	21	0	2000	—
2005	Flood	30	0	460073	—
2005	Wind Storm	11	0	—	—

Source: "EM-DAT: The OFDA/CRED International Disaster Database, www.em-dat.net - Université catholique de Louvain - Brussels - Belgium"

II. Disaster Management system

2.1 Administrative system

Conventional long form: Islamic Republic of Pakistan

Conventional short form: Pakistan

Government type: federal republic

Capital: Islamabad

Administrative divisions: 4 provinces, 1 territory*, and 1 capital territory**; Balochistan, Federally Administered Tribal Areas*, Islamabad Capital Territory**, North-West Frontier Province, Punjab, Sindh

2.2 Legal system, legal framework

The National Calamities (Prevention and Relief) Act, 1958: The Act provides for the maintenance and restoration of order in areas affected by certain calamities and for the prevention and control of and relief against such calamities. Provincial Relief Commissioners (who also

happen to be Senior Members Board of Revenue) have been given the responsibility of relief under section 4 of the Act.

Emergency Services Ordinance, 2002: The ordinance establishes emergency service to deal with emergencies in an effective manner and encounter threats to public from modern warfare, terrorism and disasters and defines responsibilities at each level. The National Council was established to regularly monitor the performance of this service and ensure continuity in the process of rule making in the management of emergencies / disasters during peace time.

Provincial governments have administrative powers. District emergency Officer is responsible for the functional management. The Federal government is mainly responsible for ensuring uniform standards for the service throughout the country, provide advance training to Officers through National Academy and oversee the performance of provinces.

The Ordinance includes definitions of disaster related terms. Under the Emergency Services Ordinance, the Federal, Provincial and District Governments must set-up an Emergency Service, which is responsible for preparedness and rapid response to emergencies and disasters of any scale.

The National and Provincial Crises Management Cells of the Ministry of Interior and Home Departments respectively, shall coordinate the activities of all emergency services at the national and provincial levels.

Local Government Ordinance 2001: The Local Government Ordinance (LGO) provides new avenues for an effective and context-specific disaster management.

Environmental Legislations

Pakistan Environmental Protection Act, 1997: The Act provides for the protection, conservation, rehabilitation and improvement of the environment, prevention and control of pollution, and promotion of sustainable development.

Key features of the Act:

- Establishment of the Environmental Protection Council to coordinate and supervise enforcement of the provisions of this Act
- Establishment of the Environmental Protection Agency
- Establishment of a National Environmental Coordination Committee
- Establishment of the Provincial Sustainable Development Funds to provide financial assistance to the projects designed for the protection, conservation, rehabilitation and improvement of the environment, the prevention and control of pollution, the

sustainable development of resources and for research in any aspect of environment

Karachi Port Trust (Amendment) Ordinance, 1994: The Ordinance is a federal act that amends the Karachi Port Trust Act, 1886 (Bombay Act VI of 1886). Through Article 29 of the Karachi Port Trust (Amendment) Ordinance, 1994, a new section (Section 90) has been inserted in the Karachi Port Trust Act, 1886, which has the following provisions:

- The Board of Trustees, Karachi Port Trust (KPT), is responsible for ensuring that the marine environment within the Karachi Port's limit remains free from pollution.
- Discharge of pollutants including waste, oil, radioactive material, hazardous material, bilge discharge from tankers and vessels is prohibited within the limits of the Karachi Port.
- Anyone violating the above clauses may be asked to pay a fine of up to Rs. 10 million in addition to bearing the cleaning cost.

National Fund for Cultural Heritage Act, 1994: Under this act, the National Fund for Cultural Heritage was established for "conservation and preservation of Pakistan's national heritage and its proper maintenance."

Agricultural Pesticides (Second Amendment) Ordinance, 1995: The Agricultural Pesticides (Second Amendment) Ordinance, 1995 is a federal act that amends the Agricultural Pesticides Ordinance, 1971. Under the amendment, the penalties for selling, importing, manufacturing and formulating unregistered brands of pesticides have been drastically increased.

AJK Environmental Protection Act, 1996: The AJK Environmental Protection Act, 1996 provides for "the control of pollution and preservation of living environment."

2.3 Structure of disaster management

Emergency Relief Cell (ERC) in the Cabinet Division serves as the focal point during emergencies. At the provincial level, the ERC coordinates with provincial relief departments / relief commissioners who are responsible for effective distribution of relief items in respective provinces.

The Cell is also responsible for dealing with institutional donors and receives grants / donations / funds for distribution through the Prime Minister's Disaster Relief Fund.

The Federal Flood Commission (FFC), Emergency Relief Cell (ERC) and Pakistan Meteorological Department are the key agencies for disaster management in Pakistan. However, in case of a disaster, almost all federal and provincial ministries, departments and divisions start dealing with the situation offhandedly.

Responsibilities of the ERC in connection with disaster relief are:

- a. To provide in cash as well as in kind to supplement the resources of the provincial governments in the event of major disasters
- b. To coordinate the activities of the federal Division, Provincial Governments, as well as governmental, semi governmental, international and national aid-giving agencies, in the conduct of operations for relief of disasters
- c. To maintain contact with international aid-giving agencies/ voluntary organizations and donor countries for disaster relief measures
- d. To administer Relief Funds, being maintained at the Federal Level
- e. To stockpile certain items of basic necessity and establish central inventory of resources
- f. To provide assistance to the calamity stricken friendly countries

The ERC operates an Emergency Control Room, which coordinates the situation during calamities by liaising with relevant agencies such as the Federal Flood Commission, Meteorological Department, and Provincial Governments.

The ERC maintains a warehouse in the capital, Islamabad, stocking essential non-perishable relief item such as medicines, blankets, clothing and tents. In addition, there is a Relief Goods Dispatch Organization (GDO) located in Karachi. This is responsible for receiving and dispatching all relief goods from foreign and local agencies in the event of a disaster. The ERC also maintains an Aviation Squadron with a fleet of 4 helicopters, whose task is to assist rescue operations and enable officials to visit the affected areas.

Disaster Management and Environment

The Ministry of Environment is responsible for national policy programs and plans regarding environment, pollution, ecology, housing, physical planning and human settlements.

2.4 Priority on disaster risk management

Structural and non-structural measures for flood management, which include:

Structural:

- Construction of embankments
- Construction of spurs/battery of spurs

- Construction of dikes/gabion walls/flood walls
- Construction of dispersion/diversion structures
- Diversion of flood water channels
- Construction of dams
- Construction of bypass structures

Non-structural:

Improved flood forecasting system through;

- Effective flood forecasting and dissemination system
- Real time rain fall and river flow data collection
- Weather radar prediction
- Modern system of transmission of flood forecasts
- Timely warning and evacuation arrangements by provincial relief departments and district administrations

III. Disaster management plan

Ten-Year Perspective Development Plan (2001-2011)

By adopting strategies to reach the Millennium Development Goals (MDGs), the Ten-Year Perspective Development Plan was launched into operation on 1st July, 2001. Its total size has been fixed at Rs.11,287 billion in current prices out of which Rs.8,747 billion have been envisaged as the investment of private sector and Rs.2,540 billion as Public Sector Development Program (PSDP).

Water Resources Development: The Plan recognizes the severity of drought in Sindh and Balochistan and the subsequent shortage of water that has aggravated the ongoing water crises. The major goal of policy formulation and sectoral planning in water resources sector during the Ten-Year Perspective Development Plan is to uplift the agro based economy on the national level by maximizing crop production. This will be achieved through progressively increasing surface water supplies using the latest technologies available and protecting land and infrastructure from water logging, salinity, floods and soil erosion.

The strategy to achieve these goals comprises:

1. Augmentation and conservation measures to overcome the scarcity of water
2. Drainage and reclamation program to protect the disastrous area
3. Flood Control and Protection
4. Rehabilitation of irrigation system of Punjab and Sindh and modernization of barrages in Punjab

The Plan gives high priority to the construction of medium and large dams and canals to meet water requirements in the future. The total outlay for the Federal Ten-Year Development Plan for Water Sector

amounts to Rs.418 billion out of which Rs.63 billion has been proposed for the Three-Year Program (2002-05).

In addition, small irrigation schemes will be started; construction of 303 spurs and 1101 kilometers of flood embankments and improvement of flood warning systems will be carried out. During the three-year program (2002-05), 240 and 68 kilometers of flood embankments will be constructed to safeguard life and property.

Risk Mitigation Fund: A risk mitigation fund of US \$ 5 million has been established to assist the poor in case of loss of income generating assets due to unforeseen circumstances beyond their control. The Fund is to reduce the risk aversion of the poor and enable them to take advantage of potentially viable new technologies, production choices and income opportunities. As a safety net measure, a Deposit Protection Fund of US \$ 5 million has also been established to provide security to the savings of the poor with Khushhali Bank.

Environment: An allocation of Rs. 13.7 billion has been proposed in the Ten- Year Plan for environment and Rs. 1486.1 million in the Federal Three Year Program (2001-04). The key program areas include environmental protection, resource conservation, watershed management, social forestry, fuel efficiency etc. There are fourteen projects under implementation through the Ministries of Environment, Local Government & Rural Development and Water & Power and are being coordinated by the Planning & Development (P&D) Division. The Ten-Year Perspective Development Plan suggests 'fire-fighting approach' to address the problems of salinity, water logging, droughts, erosion and desertification.

National Environmental Action Plan (NEAP): In its ninth meeting (Feb.2001), the Pakistan Environmental Protection Council (PEPC) approved a National Environmental Action Plan. The NEAP reflects a commitment to the environment within government, integration of bottom-up approach into environmental strategies, greater emphasis on poverty reduction and a defined role for the government in achieving the environmental objectives of the country. The primary objective of the NEAP is to initiate actions and programs for achieving a state of environment that safeguards public health, promotes sustainable livelihood and enhances the life and quality of the people. The government of Pakistan has also made following announcements as part of its commitment to the protection and preservation of environment.

The Pakistan National Conservation Strategy: To keep the development planning within the context of a national environmental plan, Pakistan prepared its National Conservation Strategy in collaboration with IUCN – The World Conservation Union - in 1992. The Canadian International Development Agency (CIDA) supported the activity while the United Nations Development Programme (UNDP) supported its additional

sector activities. The objectives of the National Conservation Strategy are:

1. Conservation of natural resources
2. Sustainable Development
3. Improved efficiency in the use and management of resources

IV. Budget size on national level

Prime Minister's Disaster Relief Fund: The Emergency Relief Cell (ERC) maintains the PM Disaster Relief Fund, established in 2000 at the federal level. The Prime Minister approves required funds for provincial governments including Federally Administered Tribal Areas (FATA), Northern Areas and Azad Jammu Kashmir during humanitarian crises.

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V. Progress and situations of the Hyogo Framework for Action (HFA)

VI. Projects on disaster reduction headed by your Ministry

VII. ADRC Counterpart

Emergency Relief Cell
Cabinet Division