



NATIONAL DISASTER RESPONSE PLAN 2019



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NATIONAL DISASTER RESPONSE PLAN 2019



DEDICATION

This document is dedicated to “the people of Pakistan especially those who lost their lives in disasters and to the brave people of Pakistan who are playing their part for a Safer, Prosperous and Resilient Pakistan”.

MESSAGE BY THE HONORABLE PRIME MINISTER OF PAKISTAN



Calamities have always posed formidable challenges to mankind. The pursuit to neutralize the threat led to evolution of practices, varying in content but common in outlook wherein total reliance was placed on '**Response**'. The structural imbalance of such a posture became amply evident during Earthquake-2005. To redress the weaknesses, National Disaster Management Authority (NDMA) was created through National Disaster Management Ordinance 2007 later NDM Act - 2010.

I am glad that in its capacity, **NDMA has developed elaborate Plans covering the myriad potential NATURAL as well as INDUCED Disasters**. In this context, the National Disaster Response Plan (**NDRP-2019**) has addressed relevant aspects of potential hazards, vulnerability analysis, available/ projected resource inventories, roles and responsibilities of stakeholders, identification of shortcomings and most importantly expounded cost-effective counter measures.

I am pleased to present to the people of Pakistan the National Disaster Response Plan-2019 which will enhance the capacities of country's Disaster Management Bodies to manage disasters using a comprehensive National Approach. I am confident that the document will contribute towards clearing concepts, building networks, harmonizing initiatives and energizing stakeholders.

I wish, the guidelines set forth by the NDRP-2019 are followed by all concerned to save human lives and property. NDMA, on its part, must bring about any changes warranted by experience to make the NDRP a truly living document.

I am also confident that with materialization of such ventures, the coming times will witness attainment of goals for better management of hazards/ disaster and will make Pakistan Disaster Resilient.

"Pakistan Paindabad"

Imran Khan
Prime Minister
The Islamic Republic of Pakistan



MESSAGE BY THE CHAIRMAN NATIONAL DISASTER MANAGEMENT AUTHORITY



Pakistan has a **diverse landscape** from snowcapped & rugged mountains, riverine plains, vast deserts and extended coastal area **exposing Pakistan to** all types of **Natural Hazards** i.e **Geological, Hydro-Meteorological, as well as Human Induced ones**. Since inception, Pakistan has faced/ handled devastating disasters; however, over the period of time Disaster Management Bodies/ System (Civil Defense, Emergency Relief Cell, Federal Flood Commission, National Crisis Management Cell, NDMA and PDMA's) have gone mature and are contributing towards making a disaster resilient Pakistan. **Today, I am confident that Disaster Management Bodies of Pakistan are in the process of becoming capable and ready to handle all types of disasters at short notice with minimum losses to human life.**

The functioning of National Disaster Management Commission (NDMC) under stewardship of the Prime Minister and its executive organ i.e. National Disaster Management Authority (NDMA), ushered in an across the board transformation of the national perspective on the subject. While disasters are beyond our control, **our capacity** to minimize risks, prevent losses, prepare, respond and recover **has been improved significantly**. We have considerably enhanced our technical compatibilities in forecasting and closely monitoring predictable hazards. A planned re-orientation of all stakeholders heralded the much-needed evolution of legal frameworks, administrative arrangements, organizational structures and financial outlays to achieve desired Disaster Risk Management goals.

NDMA has revised/ formulated National Disaster Response Plan (NDRP-2019) after extensive cross-sectoral consultations which seeks to upgrade the country's ability to cope with all conceivable disasters. To achieve this purpose, complete range of disaster management activities from **Preparedness to Response** have been addressed. The formulation outlines a framework for emergency response at different levels of the government structure; identifies roles and responsibilities of various stakeholders and lays down coordination mechanism for activities involving the United Nations, INGOs / NGOs, Civil Society Organizations, Public & Private Sectors and Media to harness the full national potential for efficient disaster management.



The efficacy of any response being dependent on its currency, the NDRP needs to be kept relevant through regular updation. Towards this end, NDMA will welcome suggestions/ recommendations for improvement.

I wish success to all engaged in Disaster Response initiatives.

**Lieutenant General
Omar Mahmood Hayat, HI(M)
Chairman NDMA**

ACKNOWLEDGMENT

This Plan is an outcome of collaborative efforts of National Disaster Management Authority (NDMA) and an Expert Team of Consultants from Asian Disaster Preparedness Centre (ADPC). NDMA acknowledges its officials Brigadier Mukhtar Ahmed, Member Operations and Major Muhammad Amjad Iqbal, Deputy Director (Response) whose concerted efforts paved the way for revision of National Disaster Response Plan (NDRP). All this was made into tangible results by the hard work of the team of Response Directorate, Lieutenant Commander Nadeem Bashir (Deputy Director), Mr. Farhan Ahmad and Mr. Kazim Rahim (Assistant Directors) under supervision of Lieutenant colonel Muhammad Ala Ud din (Director Response). Their continuous guidance and support during the process remained a great help to finalize the document.

The Vision and guidance of former Chairman NDMA and present CEO National Disaster Risk Management Fund (NDRMF), Lieutenant General Nadeem Ahmed (Retired) remained instrumental to develop quality plan. The dedicated team of consultants Mr. Muhammad Sufyan, Brigadier Dr. Waseem Ishaque (Retired), Mr Hamad Latif and Mr. Tailal Masood worked relentlessly in gathering various details related to governmental, non-governmental departments and other stakeholders for revising NDRP-2019, we also appreciate the professionalism and technical support provided by Brigadier Sajid Naeem (Retired), Country Manager ADPC under Pakistan Resilience Partnership (PRP), National Humanitarian Network (NHN) and Ms. Sana Zulfiqar (NHN Coordinator) who acted as the facilitator/ bridge to ensure timely engagement of relevant non-governmental stakeholders.

NDMA also owes special thanks to provincial and regional governments particularly their disaster management authorities and line departments for providing their valued input for this national cause.



EXECUTIVE SUMMARY

National Disaster Response Plan is amongst the key document outlining the guidelines for managing and responding to disasters/ emergencies in the country. The first ever National Disaster Response Plan in the country was developed in 2010; since then there are several changes/ factors evolved warranting revision of National Disaster Response Plan in 2019. Few worth mentioning factors are as following:-

- Recurrent disasters after 2010 and experiences learnt thereof need to be incorporated in National Disaster Response Plan.
- To align with National Disaster Management Plan, formulated in 2012 after exhaustive efforts and through inputs from various stakeholders.
- To align with Global Frameworks i.e. Sendai Framework (2015 - 2030), Sustainable Development Goals Framework-2015 and Paris Agreement-2015.
- To incorporate rationalized roles and responsibilities of Government Department / Ministries in post Devolution Scenario.
- Capacities for disaster preparedness and response needs optimization as per ground realities.
- To incorporate major National, Regional and Global response efforts owing to various calamities (2011 Tsunami, Haiti Earthquake, Nepal Earthquake, Nergis Cyclone Myanmar, Yemyin & Phet Cyclones in Pakistan, 2013 & 2015 Earthquakes in Pakistan besides Floods of 2010, 2011, 2012, 2014 and 2015).

Revised version of National Disaster Response Plan is the **Government of Pakistan's "Multi-Hazard" Response Plan**. The purpose of National Disaster Response Plan is to enhance the country's ability to manage disasters using a comprehensive national approach. It outlines the processes and mechanisms to facilitate a coordinated response by the national and/or the provincial/ local level departments/agencies. To achieve this, the National Disaster Response Plan-2019, incorporates all disaster management activities; from **Preparedness to Response**. The revised plan considered the Global trends in Disaster Response and commitments of Pakistan.



Structure of the Plan. Revised National Disaster Response Plan has following four Sections:-

Section I. This section provides brief profile of Pakistan and historical perspective of disasters in Pakistan.

Section II. This section presents institutional systems for disaster management in Pakistan, including roles and responsibilities of the stakeholders, mainly at the national level.

Section III. This section provides information pertaining to the activation of NDRP, including roles and responsibilities of the stakeholders at various tiers.

Section IV. This section provides the brief information on the provision of emergency services and public assistance immediately after a disaster to save lives, reduce health impacts, ensure public safety and meet the basic needs of the people affected by the disasters.

National Disaster Response Plan also acts as the guiding document for local Government institutions who are responsible for the development and improvement of local Response Plans related to respective areas of responsibility.



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ACRONYMS

ADB	Asian Development Bank
ADPC	Asian Disaster Preparedness Center
AEOC	Agency Emergency Operations Centre
AGP	Auditor General of Pakistan
AJ&K	Azad Jammu and Kashmir
APP	Associated Press of Pakistan
CBDRM	Community Based Disaster Risk Management
CBO	Community Based Organizations
CDA	Capital Development Authority
CEO	Chief Executive Officer
CMR	Crude Mortality Rate
CO2	Carbon Dioxide
DC	Deputy Commissioner
DDMA	District Disaster Management Authority
DEOC	District Emergency Operations Centre
DERA	Drought Emergency Rehabilitation Assistance
DG	Director General
DNA	Damage Need Assessment
DPT	Diphtheria, Pertussis and Tetanus
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAD	Economic Affairs Division
EOC	Emergency Operations Centre
ERC	Emergency Response Center, Emergency Relief Cell
ERP	Emergency Response Preparedness
ERRA	Earthquake Reconstruction and Rehabilitation Authority
EWS	Early Warning System
FAO	Food and Agriculture Organization
FATA	Federally Administered Tribal Areas
FDMA	FATA Disaster Management Authority
FFC	Federal Flood Commission
GB	Gilgit Baltistan
GBDMA	Gilgit Baltistan Disaster Management Authority
GDA	Gwadar Development Authority
GIS	Geographical Information System
GSP	Geological Survey of Pakistan
HCT	Humanitarian Country Team
HFA	Hyogo Framework of Action
HIV	Human Immunodeficiency Virus
HR	Human Resource
HRFs	Human Resource Facilities



HRDN	Human Resource Development Network
IASC	Inter-Agency Standing Committee
ICRC	International Committee of the Red Cross
ICT	Islamabad Capital Territory
ICT DMC	ICT Disaster Management Cell
IFRC	International Federation of Red Cross
INGO	International Non-Government Organizations
IOM	International Organization for Migration
IUCN	International Union for the Conservation of Nature
KP	Khyber Pakhtunkhwa
M&E	Monitoring and Evaluation
MHRP	Multi Hazard Response Plan
MIRA	Multi Sector Initial Rapid Assessment
Mm	Millimeter
MoD	Ministry of Defense
Mol	Ministry of Interior
NDM	National Disaster Management
NDMA	National Disaster Management Authority
NDMC	National Disaster Management Commission
NDMO	National Disaster Management Ordinance
NDRMF	National Disaster Risk Management Fund
NDRP	National Disaster Response Plan
NEOC	National Emergency Operations Centre
NGO	Non-Government Organizations
NHA	National Highway Authority
NHN	National Humanitarian Network
NLC	National Logistics Cell
PC	Planning Commission
PCIW	Pakistan Commissioner for Indus Waters
PDMA	Provincial Disaster Management Authority
PEOC	Provincial Emergency Operations Centre
PHED	Public Health Engineering Department
PHF	Pakistan Humanitarian Forum
PM	Prime Minister
PMD	Pakistan Meteorological Department
PMSA	Pakistan Maritime Security Agency
PMTCT	Prevention of Mother-to-Child Transmission
PRCS	Pakistan Red Crescent Society
RDNA	Rapid Damage Needs Assessment
SCM	Supply Chain Management
SDG	Sustainable Development Goals

SFDRR	Sendai Framework for Disaster Risk Reduction
SHA	Seismic Hazard Assessment
SMDA	State (AJ&K) Disaster Management Authority
SOPs	Standard Operating Procedures
STI	Sexually Transmitted Infection
SUPARCO	Space and Upper Atmosphere Research Commission
T&T	Telephone and Telegraph
U5MR	Under Five Mortality Rate
UC	Union Council
UN	United Nations
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
UNISDR	United Nations International Strategy for Disaster Risk Reduction
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
USAR	Urban Search and Rescue
VAM	Vulnerability Analysis and Mapping
WAPDA	Water and Power Development Authority
WFP	World Food Program
WHO	World Health Organization
WRRC	Water Resources Research Center
WWF	World Wide Fund for Nature



TERMINOLOGIES USED

Acceptable Risk. The level of loss a society or community considers it can live with and for which it does not need to invest in mitigation.

Biological Hazard. Biological vectors, microorganisms, toxins and bio active substances, which may cause injury or loss of life, property damage, social and economic disruption or environmental degradation.

Capacity. A combination of all the strengths and resources available within a community, society or organization that can reduce the level of Risk, or the effects of a Disaster. Capacity may include physical, institutional, social or economic means as well as skilled personnel or collective attributes such as leadership and management. Capacity may also be described as capability.

Capacity Building. Efforts aimed to develop human skills or societal infrastructure within a community or organization needed to reduce the level of risk. In extended understanding, capacity building also includes development of institutional, financial, political and other resources, at different levels of the society.

Climate Change. The Climate of a place or region is changed over an extended period (typically decades or longer), there is a statistically significant change in measurements of either the mean temperature or variability of the climate for that region.

Disaster. A serious disruption of the functioning of a community or society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources. It results from the combination of hazards, conditions of vulnerability and insufficient capacity to reduce the potential negative consequences of Risk.

Disaster Risk Management (DRM). The comprehensive approach to reduce the adverse impacts of a disaster. DRM encompasses all actions taken before, during, and after the disasters. It includes activities on mitigation, preparedness, emergency response, recovery, rehabilitation and reconstruction.

Disaster Risk Reduction/ Disaster Reduction. The measures aimed to minimize vulnerabilities and Disaster Risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.

Early Warning. The provision of timely and effective information, through identified institutions, to communities and individuals so that they can take action to reduce their risks and prepare for effective response.

Emergency Management. The management and deployment of resources for dealing with all aspects of emergencies, in particularly preparedness, response and rehabilitation.

Hazard. Potentially damaging physical event or phenomenon that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. Hazards can be natural (geological, hydro-meteorological and biological) or induced by human processes (environmental degradation and technological hazards). Hazards can be single, sequential or combined in their origin and effects. Each hazard is characterized by its location, intensity, frequency and probability.

Geological Hazard. Natural earth processes that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. For example: earthquakes, tsunamis, volcanic activity and emissions, landslides, rockslides, rock falls or avalanches, surface collapses, expansive soils/ debris flow or mudflows.

Hazard Analysis. Identification, studies and monitoring of any hazard to determine its potential, origin, characteristics and behavior.

Indus River System (IRS). Refers to “River System” by major rivers, namely; Indus, Jhelum, Chenab, Ravi and Sutlej including other major tributaries such as Swat and Kabul Rivers.

Land-Use Planning. Branch of physical and socio-economic planning that determines the means and assesses the values or limitations of various options in which land is to be utilized, with the corresponding effects on different segments of the population or interests of a community taken into account in resulting decisions. Land-use planning can help to mitigate disasters and reduce risks by discouraging high-density settlements and construction of key installations in hazard-prone areas, control of population density and expansion.

Meteorological Disaster. Disasters resulting from meteorological phenomena, such as Floods, Cyclones, Droughts, Glacial Lake Outbursts Flooding (GLOF), Landslides due to heavy rain and Avalanches.

El Nino and La Nina. Comparing with the normal condition of sea surface temperatures in the equatorial Pacific Ocean, El Niño is characterized by unusually warm temperatures and La Niña by unusually cool temperatures. They have a strong impact on the continents around the tropical Pacific, and some climatic influence on half of the planet.

Prevention. Activities to ensure complete avoidance of disaster or the adverse impact of hazards.

Preparedness. Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations.

Public Awareness. The processes of informing the general population, increasing levels of consciousness about risks and how people can reduce their exposure to hazards. This is particularly important for public officials in fulfilling their responsibilities to save lives and property in the event of a disaster.

Recovery. Decisions and actions taken after a disaster with a view to restoring or improving to the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.

Relief / Response. The provision of assistance during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of an immediate, short-term, or protracted duration.

Resilience. The capacity of a community, society or organization potentially exposed to hazards to adapt, by resisting or changing, in order to maintain an acceptable level of functioning. Resilience can be increased by learning from past disasters for better future protection and in order to improve risk reduction measures.

Retrofitting (or upgrading). Reinforcement of existing buildings and structures to become more resistant and resilient to the forces of natural hazards.

Risk. The chance of losses (deaths, injuries, property, livelihoods, economic activity disruption or environmental damage) resulting from interactions between hazards and vulnerable social conditions. Risk is expressed as **Risk = Hazards x Vulnerability**. Some experts also include the concept of exposure when referring to the physical aspects of vulnerability.

Risk Assessment/ Analysis. A methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing vulnerability that could pose a potential threat to people, property, livelihoods and the environment.

Structural/ Non-Structural Measures. Structural measures refer to any physical construction to reduce or avoid possible impacts of hazards, which include Engineering measures and construction of hazard-resistant and protective structures and infrastructure. **Non-structural measures** refer to policies, awareness, knowledge development, public commitment, and methods and operating practices, including participatory mechanisms and the provision of information, which can reduce risk and related impacts.

Sustainable Development. Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of "needs," in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and the future needs (Brundtland Commission, 1987).

Technological Hazards. Danger originating from technological or industrial accidents, infrastructure failures or certain human activities, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. Some examples: industrial pollution, nuclear activities and radioactivity, toxic wastes, dam failures; transport, explosions, fires and spills.

Vulnerability. The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community or society to the impact of hazards.



Wild-land Fire. Any fires occurring in vegetated areas regardless of ignition sources, damage or benefits.

Source: National Disaster Management Plan (NDMP) 2012 of National Disaster Management Authority





PREFACE

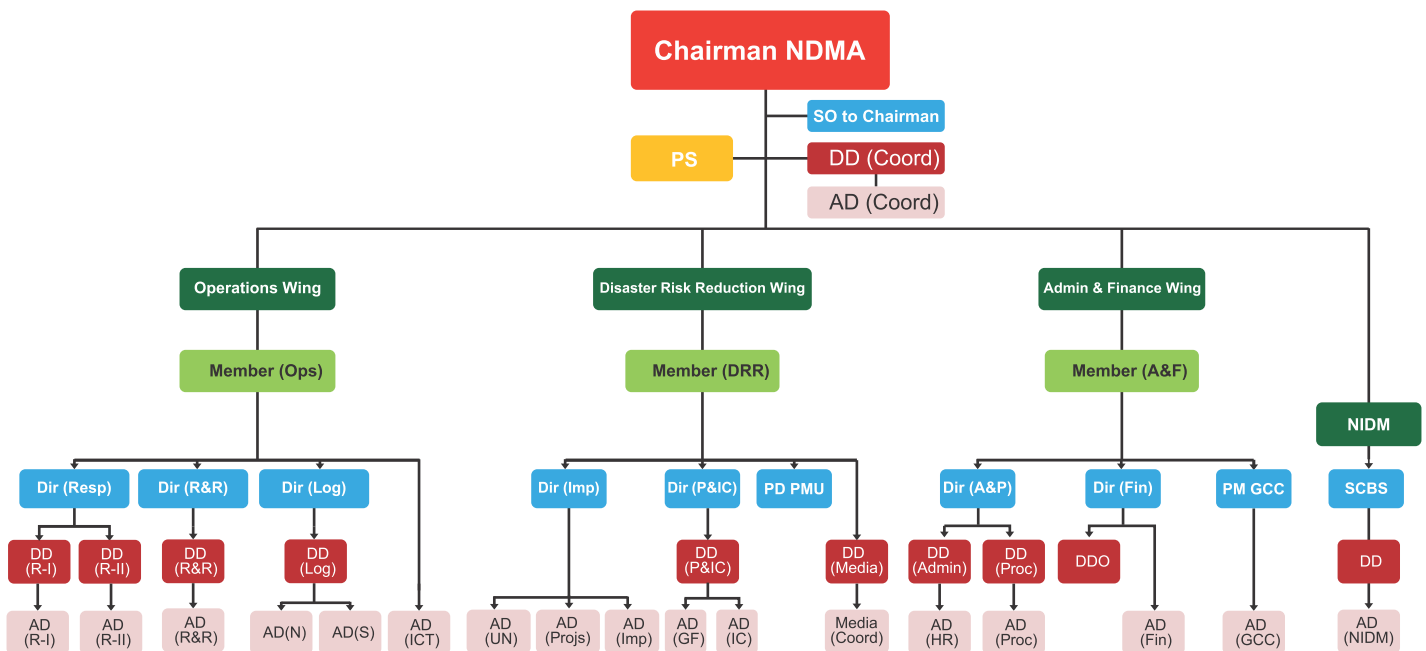




1. NDMA's Organization.

NDMA was established in 2007 as a lead Agency at Federal level to implement, coordinate and monitor the whole spectrum of disaster management including preparedness, prevention, mitigation, response, recovery, rehabilitation and reconstruction program. As per the NDM Act 2010, the Authority is headed by Chairman while it has three Members heading three Wings. The Chairman also acts as an ex-officio Secretary of the National Disaster Management Commission (NDMC), which is chaired by Prime Minister of Pakistan and NDMA serves as a Secretariat of NDMC. Organizational structure and functions of various wings of NDMA are as under:-

a. NDMA's Organogram



(Source: National Disaster Management Authority)

b. Functions of Various Wings.

In order to carry out the assigned tasks/ functions, NDMA is organized into three Wings each headed by a Member with following tasks:-

(1) Operations (Ops) Wing

- Preparation of contingency and response planning for both natural and human induced hazards.
- Development of national policies / guidelines on rescue, relief, early recovery and rehabilitation.

- (c) Operation of National Emergency Operations Centre (NEOC).
- (d) Rescue, relief, recovery, rehabilitation and reconstruction operations for all disasters.
- (e) Coordination of humanitarian assistance and rescue, relief, recovery and rehabilitation efforts with federal / provincial authorities & organizations as well as all stakeholders including UN Agencies, INGOs & NGOs.
- (f) All issues related to training and deployment of Urban Search and Rescue Teams
- (g) Briefs / presentations for PM and other dignitaries.
- (h) Conduct of emergency simulation exercises for natural and human induced disasters.

2) Disaster Risk Reduction (DRR) Wing

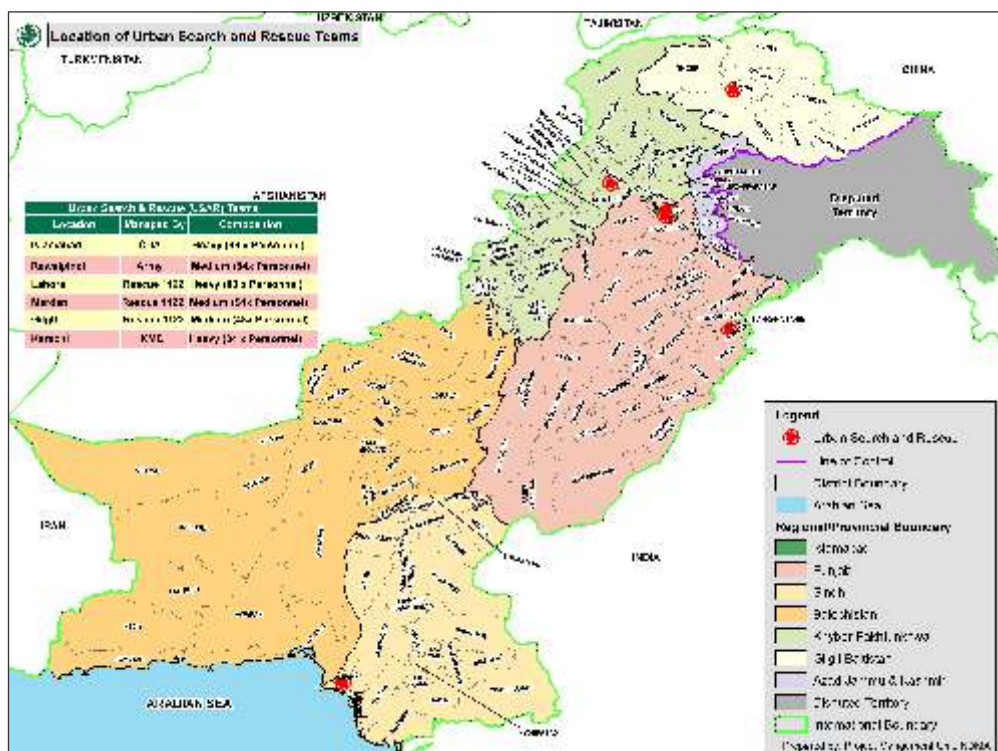
- (a) Handles all matters related to DRR Policies concerning all types of disasters, risk insurance and disaster awareness.
- (b) National Disaster Management Plan (NDMP) including implementation and progress.
- (c) Planning, coordination, execution, management and monitoring of all projects executed by NDMA with donor (s) / development partner'(s) assistance.
- (d) Monitoring and evaluation of plans, strategies at national, Provincial, District level as well as civil sector.
- (e) Mainstreaming of DRR especially into development sector as well as all other sectors.
- (f) Management of international cooperation, global frameworks, regional organization's and all conferences / meetings in this regard.
- (g) Coordination with UN Agencies, Bilateral / Multilateral organizations and INGOs / NGOs with respect to all manners in given domain.
- (h) Preparation of all PC-II related to NDMA, concerning any Wing.
- (i) Coordination with all stakeholders in given domain.
- (j) Monitor and execute MHVRA at National and Provincial levels.

(3) Administration and Finance (A&F) Wing

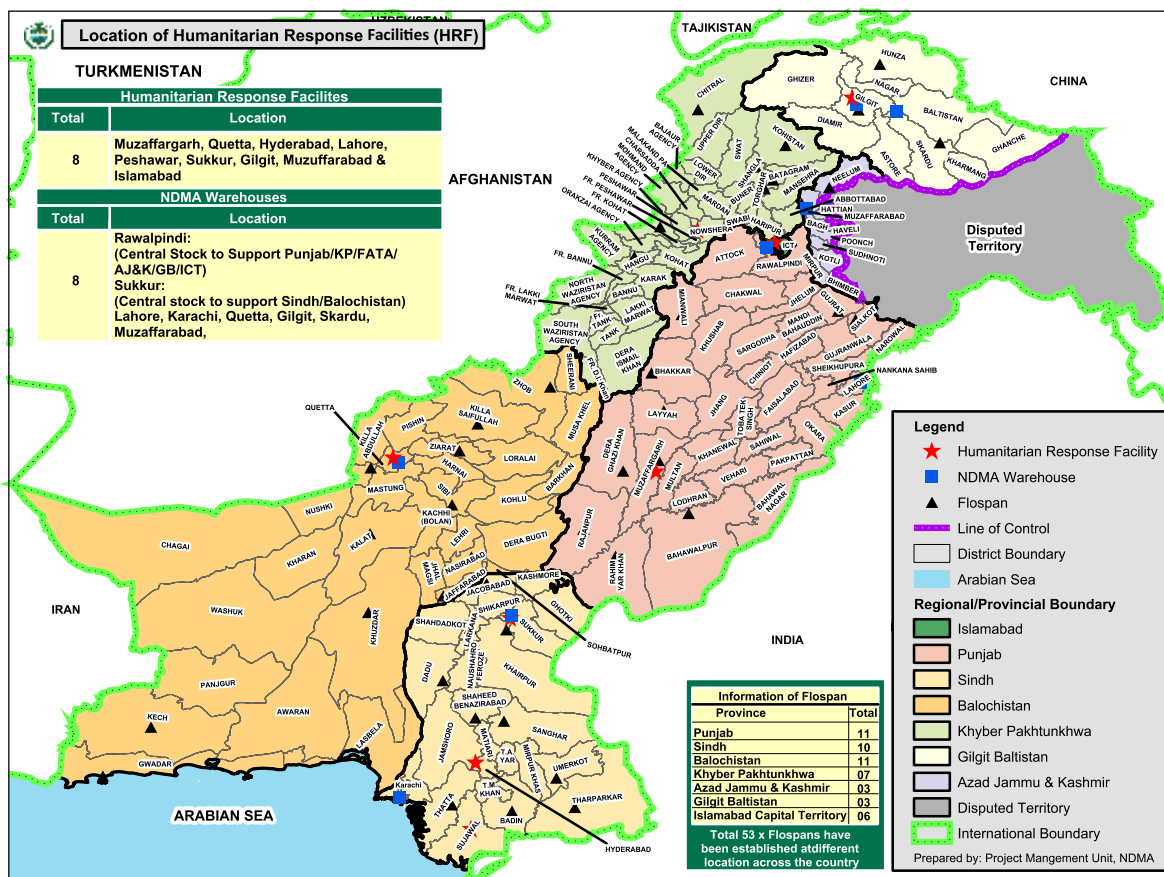
- (a) Provides all admin and finance support for NDMA operations.
- (b) Deals with procurement, transportation and record keeping of relief goods.

- ## 2. Institutional Capacity.

2. Institutional Capacity. NDMA can support over 0.3 million people across the country immediately on the onset of disaster based on the stockpiles held in warehouses. Likewise, PDMA's can also support the same number. For subsequent support procurement will be undertaken for which all process are finalized prior to disaster. Six (3 x heavy & 3 x medium) Urban Search & Rescue (USAR) Teams are raised and located at various locations for immediate response. Teams are in possession of state of the art equipment including canine component. Countrywide elaborate Warehouse Network established and stocked with necessary items. Approximately 7,500 persons have been trained by NIDM in the field of DRR, DRM and Response from 2010 to 2018. Finalization of assessment process (MIRA, RNA and DNA) to reduce time and standardized the template to be used by both by Government departments and UN Agencies. Locations of USAR Teams, Warehouses and humanitarian response facilities are shown *on Map A and B.*



Map A: Location of Urban Search and Rescue Teams



Map B: Location of Warehouse Humanitarian Response Facilities

About National Disaster Plan (NDRP)

NDRP is a guiding document that establishes a process and structure for the systematic, coordinated and effective delivery of assistance to address the consequences of any major disaster declared by the state. The revised version of the National Disaster Response Plan is structured around NDMA's Core Commitments in various phases of Disasters/ Emergencies. These commitments outline the role of NDMA, other government departments/ institutions and Humanitarian stakeholders in managing and responding to disasters/ emergencies in Pakistan.

OUR VISION

Maximize ability of Pakistan to cope with and Respond to disasters by investing in Disaster Preparedness, Coordination Mechanisms and effective & efficient Disaster Response for minimizing losses to Human Life, Livelihoods, Infrastructural and Environment.

NDRP 2019 will facilitate NDMA to work in coordinated and accountable way during humanitarian response. It allows different government institutions to understand what is expected from whom and when, ensuring appropriate contributions and effective disaster and emergency response. It serves two purposes:-

- Frames NDMA's Disaster Preparedness work.
- Contributes to ensuring that Disaster Response is harmonized and follows national and international standards.

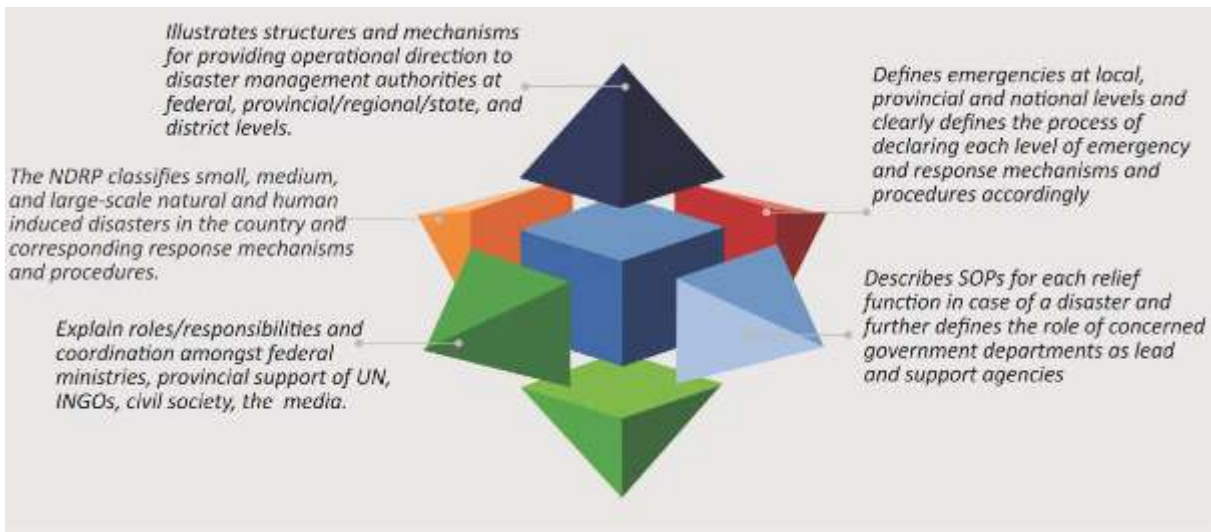
The NDRP-2019 recognizes the need to minimize, any ambiguity in the responsibility framework. It, therefore, specifies who is responsible for what at different stages of managing and responding to disasters.

NDRP-2019 can be utilized during normal times, however it is activated specifically in the wake of national calamities/ disasters in any part of the country. It is designed in such a way that it can be implemented as needed on a flexible and scalable manner.

3. Purpose of the Plan. NDRP is the Government of Pakistan's "Multi-hazard" Response Plan. The purpose of the National Disaster Response Plan (NDRP) is to enhance the country's ability to manage all disasters using a comprehensive national approach. It outlines the processes and mechanisms to facilitate a coordinated response by the national and/or at the provincial/ local level departments/agencies.

4. NDRP in Perspective. NDRP classifies different types of hazards, levels of vulnerabilities and their causes, as well as the structure, functions and coordination mechanisms of DMAs at all tiers (*NDMA, PDMA, GBDMA, SDMA and DDMA*s), concerned ministries, departments, Non-Govt Organisations (NGOs/ INGOs), UN Agencies, media, charities/ foundations, private sector and CBOs at all levels of governance. It focuses on the existing relief system in Pakistan, the procedure of declaring calamity-hit areas, early warning systems and the information flow from national to provincial, provincial to district and district to community level and vis-à-vis in the wake of different disasters. **Local government institutions are responsible for the development and improvement of Local Response Plans related to their areas of responsibility and underlying risks.** The NDRP-2019 prescribes the relevant activities on how the Disaster Response shall be conducted as augmentation or assumption of response functions to the disaster affected areas.

5. Scope of NDRP 2019



6. Who Should Use It? The main users of this guiding document are the decision-makers at National, Provincial and District levels responsible for managing/ responding to Disasters/ Emergencies. *It also serves as a guiding document for all Ministries/ Departments/ Authorities/ Organizations at Federal, Provincial and District level to prepare their respective Disaster Response Plans/ Guidelines/ Standard Operating Procedures (SOPs).*

7. Applicability of NDRP

Before a Disaster or Emergency	During a slow onset disaster	During a sudden onset disaster	Early Recovery	Back to "Normal"
To verify if preparedness work can deliver the expected response.	To ensure that the designated focal points at various levels understand the unfolding situation and respond in a timely and appropriate manner.	To ensure the designated focal points at various levels respond with speed effectively and immediately.	To transition from "Response Mode" into "Early Recovery" mode in a way that contributes to building resilience.	To ensure the designated focal points at various levels scale down and/or close response activities appropriately.

8. Activities Under NDRP

- a. **Pre-Disaster.** In a pre-disaster stage, NDRP acts as a guiding resource where an ADVISORY is issued from NDMA or PDMA. This happens when an **Incident** has grown into a **Crisis** or **Emergency** with the possibility of becoming a full-blown **Disaster**. During this stage, NDMA and PDMA continuously conduct Emergency Response Preparedness (ERP), such as continuous monitoring (identification of threats, hazards, and Risks) and strategic forecasting.

- b. During Disaster.** During Disaster Phase or immediately after impact, the REPORTS, including the results of Multi-Cluster/ Sector Initial Rapid Assessment (MIRA), requests from the affected area or district(s) are considered as the basis for response using the NDRP.
- c. Post Disaster.** In a Post-Disaster Scenario, the request for assistance from the affected areas may become basis for NDRP activation through initiating response operations. This will involve the start of the Disaster Needs Assessment (DNA). Each response is followed by conducting post Response Operation Evaluation to document the lessons learned and best practices. These evaluation reports will be submitted to the NDMA or PDMA for improvement of continuing plans and organizational development including the updating of this document i.e. NDRP.

9. Stakeholders/ Key Players/ Facilitators and Enablers

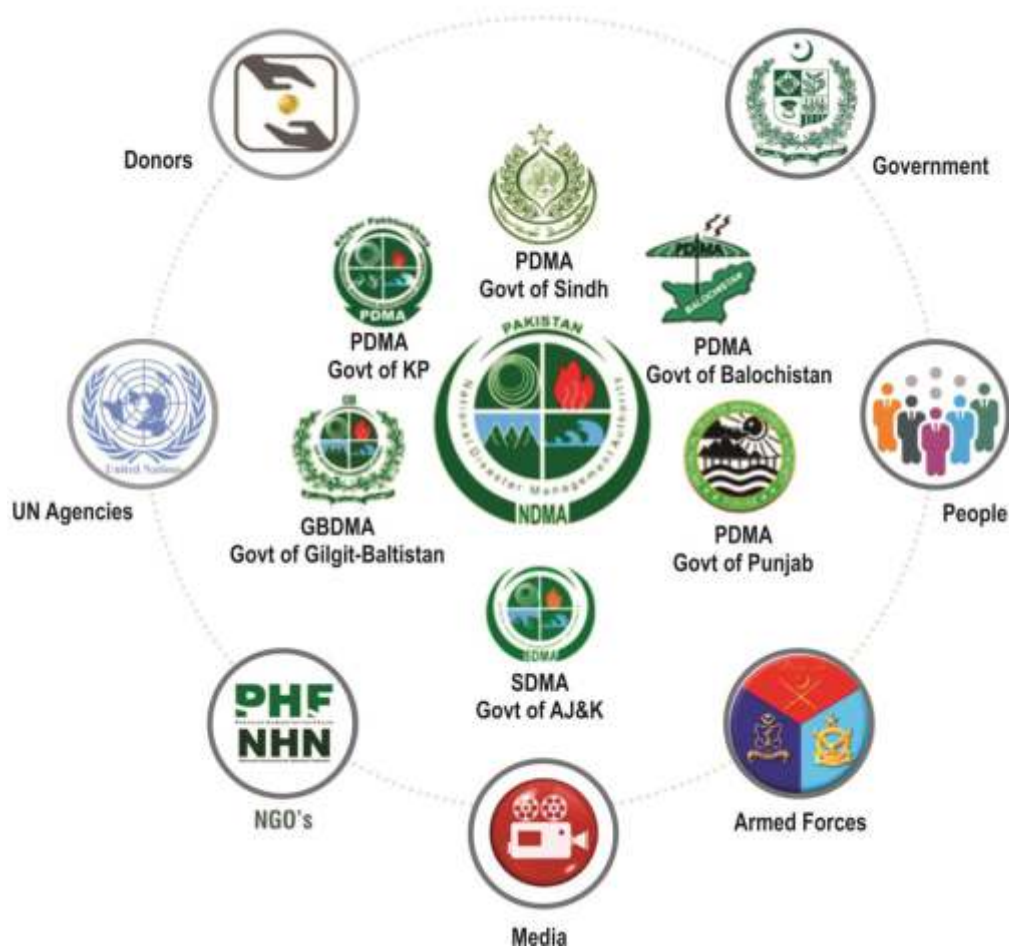


Figure 1: Stakeholders/ Key Players/ Facilitators and Enablers

10. Approaches Used for the Preparation of NDRP.

In the development of NDRP, international humanitarian standards and principles like Sphere Humanitarian Standards and its companions, Core Humanitarian Standards, ICRC Code of Conduct are used as guiding documents. The following cross cutting themes are added as particular areas of concern in disaster response and address individual, group or general vulnerability issues:-

- a. **Disaster Risk Reduction.** This is defined as the concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters. Such adverse events include Natural Disasters like Storms, Earthquake, Floods, Droughts and Sea-Level Rise.
- b. **Gender and Inclusion.** The equal rights of women and men are explicit in the universal declaration of human rights document. Women and men have the same entitlement to humanitarian assistance and protection, to respect for their human dignity, to acknowledgment of their equal human capacities. As per Census 2017, there is 51% male and 49% female population in Pakistan. Humanitarian responses are more effective when they are based on an understanding of the different needs, vulnerabilities, interests, capacities and coping strategies of women and men, girls and boys of all ages and the differing impacts of disaster or conflict upon them.
- c. **Environment.** The environment is understood as the physical, chemical and biological elements and processes that affect disaster-affected and local populations' lives and livelihoods. It provides the natural resources that sustain individuals and contributes to quality of life.
- d. **Protection.** Special measures will be taken to ensure that all children are protected from harm such as malnutrition, exploitation, abduction and recruitment into armed groups/ fighting forces, sexual violence and given equitable access to basic services. As per Census 2017, there are 43.15% children under the age of 15 years. It is crucial that their views and experiences are not only elicited during emergency assessments and planning but that they also influence humanitarian service delivery and its monitoring and evaluation.

Older men and women are those aged over 60 years, according to the UN, but a definition of 'older' can vary in different contexts. As per Census 2017, there are 3.50% people are 65 years and above in Pakistan. Isolation and physical weakness are significant factors exacerbating vulnerability in older people in disasters or conflict, along with disruption to livelihood strategies and to family and community support structures, chronic health and mobility problems and declining mental health. Special efforts must be made to identify and reach housebound older people and households headed by older people.

As per the Census 2017, there are 3.2 million disabled people in Pakistan which includes 8.06% Blind, 7.43% Deaf, 18.93% Crippled, 6.39% Insane, 7.60% Mentally Retarded and 8.23% having multiple disability. The UN Convention on the Rights of Persons with Disabilities (CRPD) defines disability as an evolving concept that results from the interaction between persons with impairments (which may be physical, sensory, intellectual or psychosocial) and the attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others. It is, therefore, the presence of these barriers that prevent persons with disabilities from fully and meaningfully participating in, or benefitting from, mainstream humanitarian assistance program.

11. Documents Used for the Preparation of NDRP. The Policy Documents and Guidelines prepared by NDMA as mandated by NDM Act 2010 have also been used for revision of NDRP-2019. Some of the key documents are listed below, the detail contents of the reference documents are attached as Annex A; **this plan may be read in conjunction with referred documents.**

- a. National Disaster Management Act 2010.
- b. National Disaster Risk Reduction Policy 2013.
- c. National Disaster Response Plan 2010.
- d. National Disaster Management Plan 2012.
- e. National Policy Guidelines on Vulnerable Groups in Disasters 2014.
- f. Host Nation Support Guidelines 2018.





SECTION-1

DISASTERS IN PAKISTAN AN OVERVIEW



Profile of Pakistan

1.1 Location on Globe. Pakistan is located in **South Asia**, sharing borders with **China** in the Northeast, **Afghanistan** in the Northwest & West, **Iran** in the Southwest, **Arabian Sea** in the South and **India** in the East & Southeast. The Country has a total area of 881,913 sq km *(Including all regions)*.



Total Area: 881,913 km² *(including all regions & provinces)*
Administrative Units: Seven (7)
Provinces: Four (4)
Regions: Three (3) ICT, AJ&K, GB
Districts: 150 *(As of October 2018)*
Population: 207.77 million *(Pakistan Census 2017)*
Growth Rate: 2.4 % Annually *(Pakistan Census 2017)*
Population Density: 244.4/sq km
Men Population: 51% *(Pakistan Census 2017)*
Women Population: 49% *(Pakistan Census 2017)*
Rural Population: 63.2% *(Pakistan Census 2017)*
Economy Growth: 5.79% Annually

1.2 Geography/ Topography. Geographically, Pakistan is divided into three major regions i.e. Northern Highlands, the Indus River Plains and Balochistan Plateau. Pakistan has a diverse landscape varying from **Plains** to **Deserts, Forests, Hills**, and **Plateaus** ranging from the **Coastal areas** of the **Arabian Sea** in the South to the mountains ranges of the **Karakoram, Himalayan, Hindu Kush** and extensive **Glaciers** in the North. Inter-mountain valleys

Map 1.1 Location of Pakistan on Globe

make up most of the **Khyber Pakhtunkhwa (KP)** and rugged plateaus cover much of **Balochistan** in the West. In the East are located irrigated plains that lie along the **River Indus** and cover much of **Punjab** and **Sindh**. The Country's main river is the **Indus** (2,749 km within Pakistan) and its tributaries are the **Chenab** (730.6 km), **Ravi** (680.6 km) and **Jhelum** (611.3 km). **Deserts; Cholistan** (*Bahawalnagar, Bahawalpur & Rahim Yar Khan*) and **Thal** in Punjab (*area between Indus & Jhelum Rivers covering districts of Bhakkar, Khushab, Mianwali, Layyah, Jhang and Muzaffargarh*), **Tharparkar** in Sindh and **Kharan** (*tehsil Washuk*) in Balochistan.

Pakistan geologically overlaps both with the **Indian** and the **Eurasian tectonic plates**; where Sindh and Punjab Provinces lie on the North-Western corner of the Indian plate while Balochistan and most of the Khyber-Pakhtunkhwa lie within the Eurasian plate which mainly comprises the Iranian Plateau, some parts of the Middle East and Central Asia.

1.3 Demography. According to Census 2017, Pakistan has an **estimated population of 207.77 million**. Between 1998 and 2017, the average population has grown approximately at

the rate of 2.10 percent annually. According Census 2017 report, the overall population density was 244.4 persons per square km. Pakistan's population has a substantial proportion of young people. In 2017, 35.4 percent Population was in the age group of 10-14 years, 60.4% between 15-64 years, and only 4.2 percent in the age group of 65 and above. According to government statistics, 51 percent of the population is male and 49 percent are females. Moreover, the Country's population is concentrated in the Eastern Provinces of Punjab and Sindh, which contain 76 percent of the total population, 50 percent of the population lives in rural areas.

1.4 Languages. Urdu is the **National Language** while **English is Official Language** of Pakistan. Urdu and English are most often used in business and government offices. Punjabi is the most common language, spoken by 44.2 percent of the population, followed by Pushto (15.2 percent), Sindhi (14.1 percent), Saraiki (10.5 percent), Urdu (7.8 percent), and Balochi (3.8 percent). Smaller linguistic groups include the Hindko in KP, Persian speaking Hazaras in Balochistan, and Brohi in Sindh and Balochistan.

1.5 Climate. Most of Pakistan has a generally **dry climate** and receives less than 250 mm of rain per year, although the northern and southern areas have a noticeable climatic difference. The **average** annual temperature is around **27°C**. However temperatures vary with elevation from 30°C to -10°C during the winters in the mountains/ Northern Areas and to 50°C in the warmest months in parts of Punjab, Sindh, and Balochistan. **Mid-December to March is dry and cool, April to June is hot** with 25-50 percent humidity, **July to September is the wet Monsoon Season**, and **October to November** is the **dry** post-Monsoon Season.

Disasters in Pakistan: An Overview

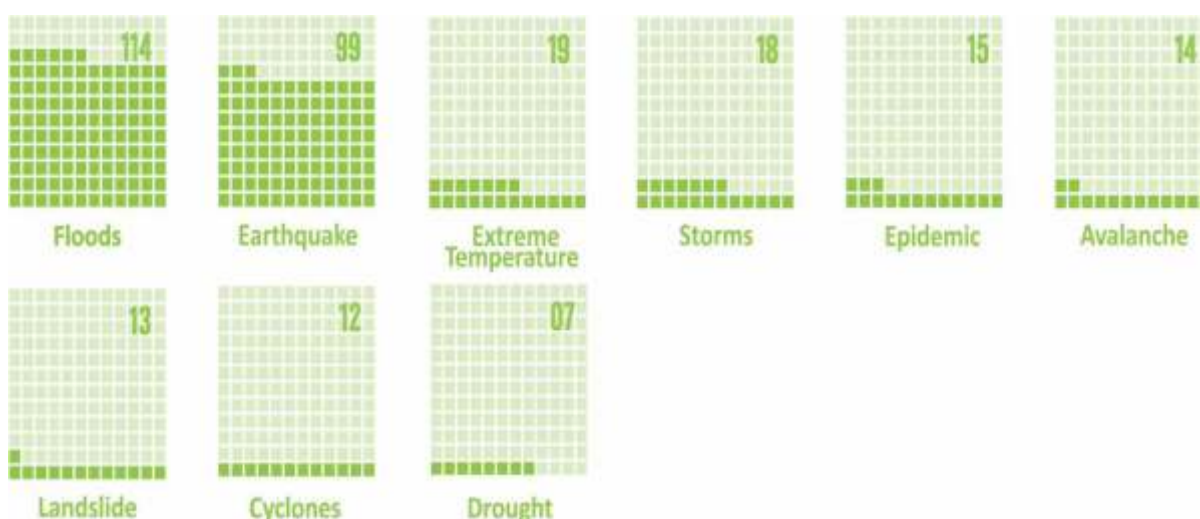
1.6 Pakistan is prone to a multitude of Natural and Human induced hazards including Floods, Droughts, Cyclones, Earthquakes, Environmental degradation and Climate Change to name but a few. These hazards have been turning to disasters of varying magnitudes in the past, affecting the lives and livelihoods of people. These disasters continue to frustrate the development efforts and challenge poor people/ government's capacities to respond.

1.7 Categories of Natural Disasters. Classification of disasters faced by Pakistan, arising from natural factors are given in **Fig 1.1**. Few disasters are a combination of different types of disasters. In addition, secondary disasters may occur after occurrence of a disaster.



Figure 1.1 Classification of Natural Disasters faced by Pakistan

1.8 Disasters Pakistan Witnessed (1947-2016)*



*Counting Disasters [1947-2016]; Pakistan Disaster Risk Index by Quaid-e-Azam University: Counting Disaster is a pioneering effort in the country to compile a statistical profile of disasters coupled with risk rankings of disaster events in Pakistan since the inception of the country in 1947.

Summary of Damages and Losses [Past 10 Years]

Disasters	Losses and Damages		
	Deaths	Injuries	Houses Damaged
Floods (2017)	271	359	996
Floods (2016)	153	113	1,452
Pre-Monsoon Heavy Rains (2016)	271	279	2,929
Floods (2015)	238	232	10,716
KP Earthquake (2015)	272	856	96,152
Floods (2014)	367	673	107,102
KP Tornado (2014)	49	267	-
Floods (2013)	333	173	79,943

Disasters	Losses and Damages		
	Deaths	Injuries	Houses Damaged
Awaran Earthquake (2013)	386	816	46,756
Mashkel Earthquake (2013)	14	52	2,000
Floods (2012)	571	2,902	636,438
Floods (2011)	520	1,180	1,604,406
Super Floods (2010)	1,985	2,946	1,602,765
Ziarat Earthquake (2008)	164	173	9,761
Floods (2008)	80	21	17,172
Cyclone Yemyin (2007)	443	-	71,486

Table 1.1 Summary of Damages and Losses [Past 10 Years]

1.9 Major Natural Disasters in Pakistan



Earthquake

Major Earthquakes those hit areas of Pakistan includes the great Quetta Earthquake-1935 and the Earthquake in the Northern part of Pakistan in October-2005. Besides these mega earthquakes, the country has experienced numerous small to medium magnitude quakes with localized impacts. ***Seismicity is especially high in the Northern and Western parts of the Country.*** Earthquakes with magnitudes larger than 7, such as the 1935 Quetta Earthquake and the 2005 Earthquake, caused significant damage including a number of human lives lost. This fact can be attributed to the vulnerability of the building structures to earthquakes.

Historical Record of Past Events (Earthquake)

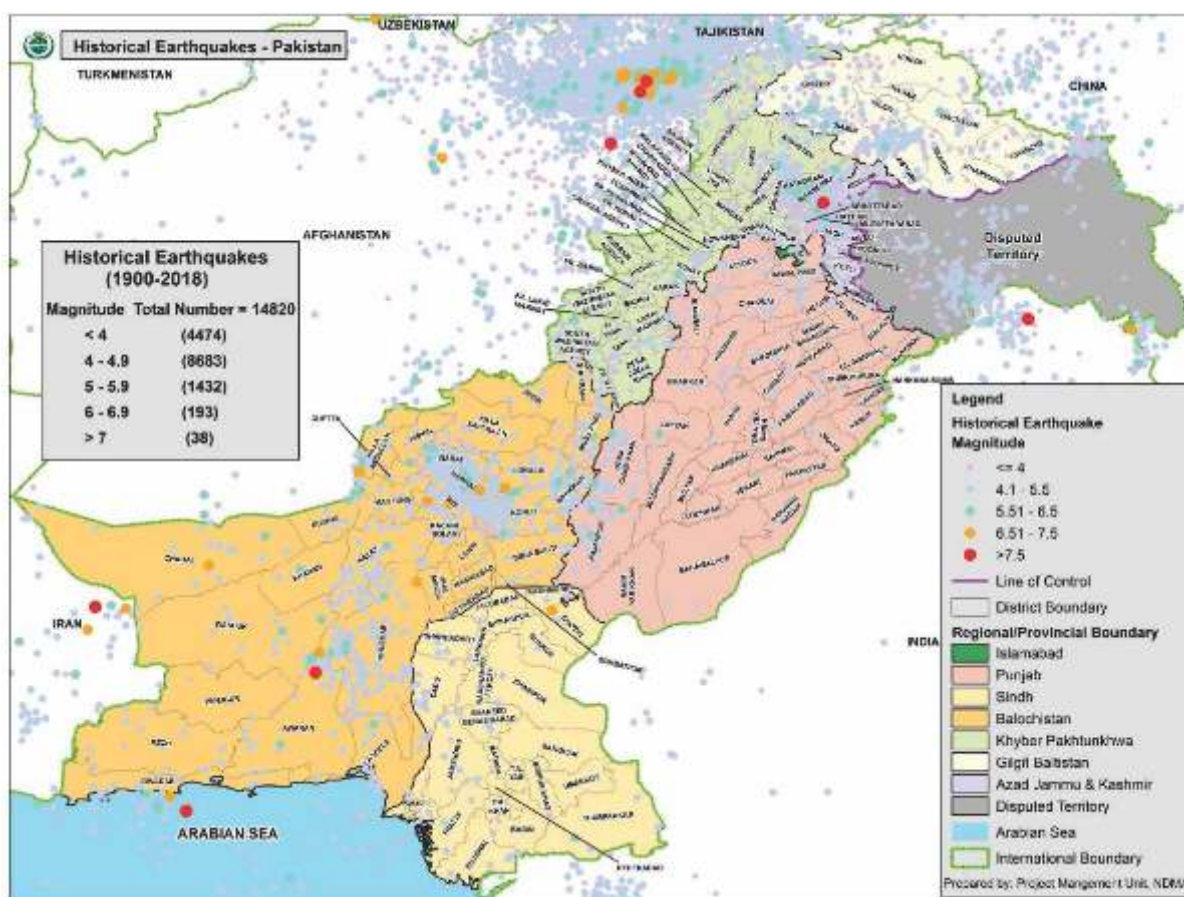
Year	Location	Magnitude	Deaths	Losses (Rs in Mn)
Oct 2015	KP, Punjab, AJ&K and GB	8.1	280	98,069 houses and 479 schools
Sep 2013	Awaran	7.7	376	6842 houses
Oct 2008	Ziarat	6.4	160	5943 houses
Oct 2005	KP & AJK	7.6	73,338	208,091
Dec 1974	Northern Area	7.4	5,300	4400 houses
Nov 1945	Makran Coast	8.3	4,000	-
May 1835	Quetta	7.7	60,000	-

Table 1.2 Historical Record of Past Events (Earthquake)

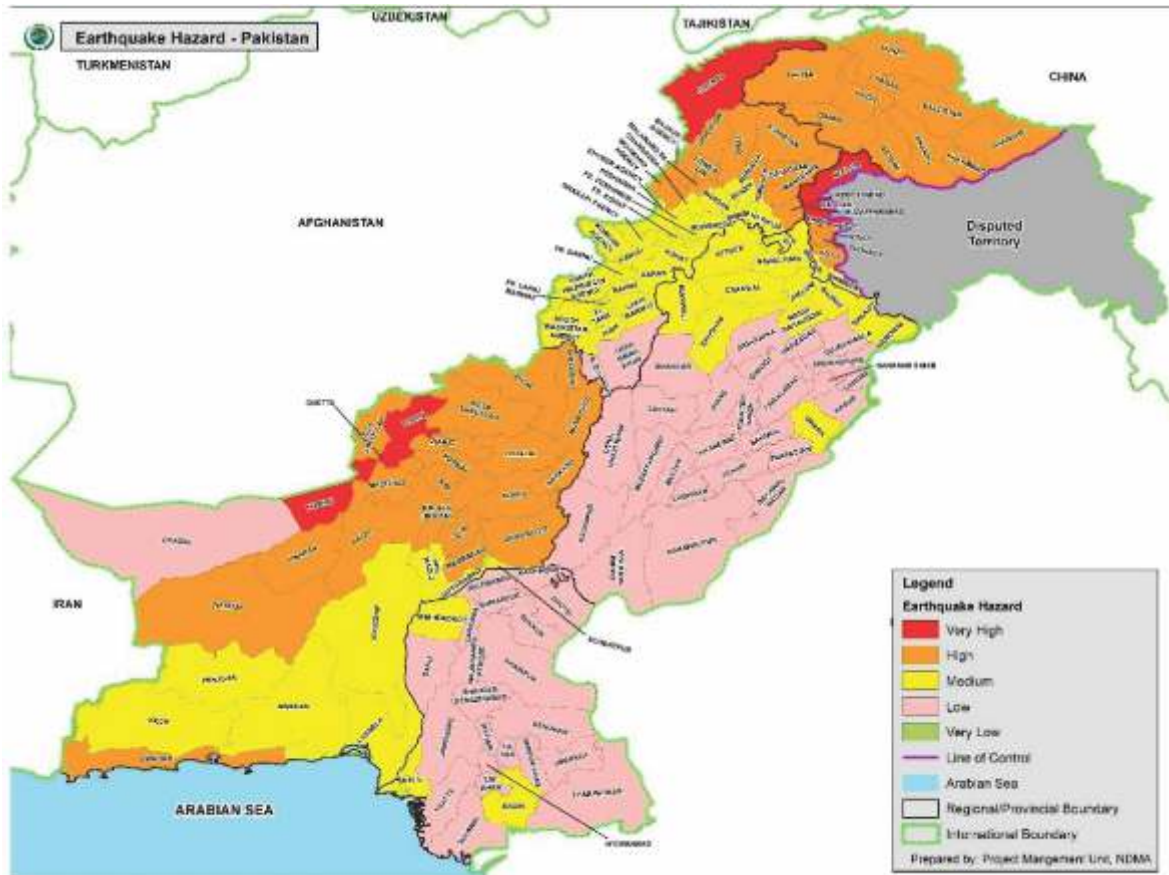
Most Vulnerable Districts (Earthquake)

Province	District
Balochistan	Quetta
KP	Abbottabad, Bajaur, Bannu, Charsadda, Chitral, Dir Lower, Malakand, Mardan, Nowshera, Peshawar, Sawat, Shangla and Swabi
Punjab	Gujrat, Narowal, Okara, Rawalpindi and Sialkot
Sindh	Karachi
AJ&K	Bagh, Hattian, Haveli, Kotli, Muzaffarabad, Poonch and Sudhnoti
G B	Astore, Diamer, Gilgit and Ghanche

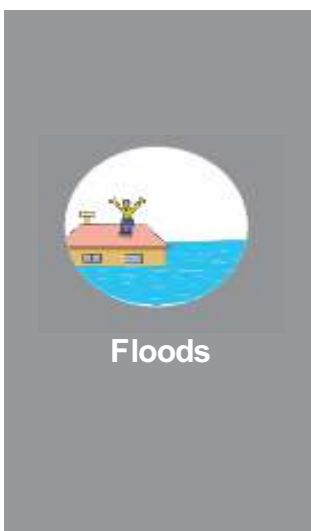
Table 1.3 Most Vulnerable Districts (Earthquake)



Map 1.2: Earthquake Risk Map of Pakistan



Map 1.3: Earthquake Hazard Map of Pakistan



Floods

Pakistan is among first five South Asian Countries with the highest annual average number of people affected by Floods. Flooding is the most recurring Natural Disaster causing devastation & damaging tremendous human lives, infrastructure and property. Normally tropical Monsoon depression systems which originate from the Bay of Bengal during the months from July to September is the main cause of Floods in Pakistan. Flood characteristics can be classified into three main categories namely Riverine Floods, Flash Floods and Urban Floods.

Major Past Events (Floods and Flash Floods)

Year	Deaths	Villages Affected (numbers)
2014	367	3,100
2013	243	8,297
2012	571	14,159
2011	520	38,700
2010	1,985	17,553

Major Past Events (Floods and Flash Floods)

Year	Deaths	Villages Affected (numbers)
2009	99	89
2008	157	8,00
2007	586	6,498
2006	541	2,477
2005	59	1,931
2004	85	47
2003	484	4,376
2001	219	50
1995	591	6,582
1992	1,008	13,208
1988	508	1,000
1978	393	9,199
1976	425	18,390
1973	474	9,719
1957	83	4,498
1956	160	11,609
1950	2,190	10,000
Total	11,744	182,482

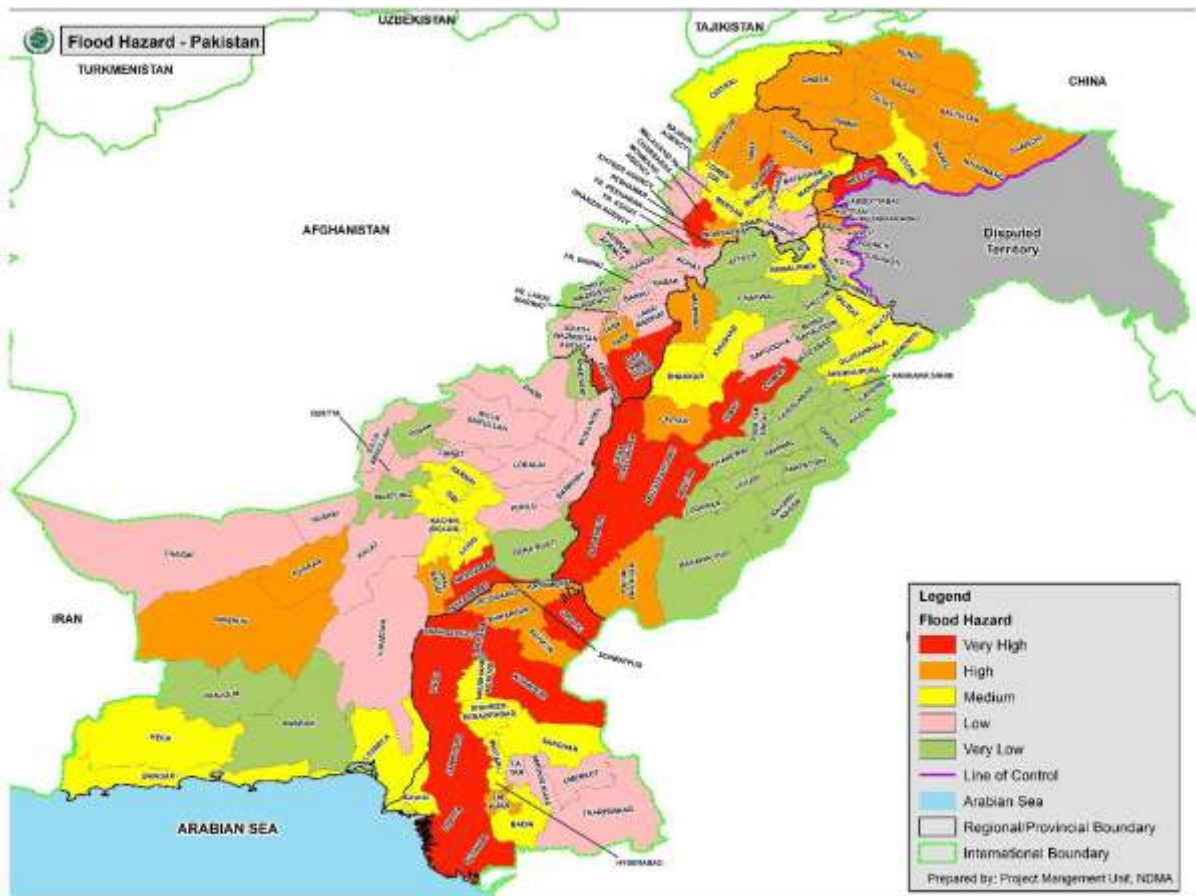
Table 1.4 Major Past Events (Floods and Flash Floods).

Most Vulnerable Districts (Floods and Flash Floods)

Province	River/Flash Flood
Balochistan	Bolan, Chagai, Gwadar, Jaffarabad, Jhal Magsi, Kech, Kharan, Khuzdar, Lasbela, Nasirabad, Nushki and Sibi
KP	Buner, Charsadda, Chitral, D I Khan, Dir Upper, Dir Lower, Kohistan, Kurram, Lakki, Marwat, Malakand, Mansehra, Mardan, North Waziristan, Noshera, Orakzai, Peshawar, Shangla, South Waziristan, Swabi, Swat and Tank
Punjab	Bakkar, D G Khan, Gujranwala, Gujrat, Jhang, Khushab, Layyah, Mianwali, Muzaffargarh, Narowal, R Y Khan, Ranjanpur, Rawalpindi, Sialkot and Sheikhupura
Sindh	Badin, Dadu, Ghotki, Jacobabad, Jamshoro, Kamber, Karachi, Kashmore, Khairpur, Larkana, Sanghar, Shahdadkot, Shikarpur, Sukker, T M Khan and Thatta
AJ&K	Bagh, Bhimber, Muzaffarabad, Neelum, Poonch, Astore, Chilas, Diamer, Ganche, Gilgit, Ghizer Hunza, Nagar and Skardu

Table 1.5 Most Vulnerable Districts (Floods and Flash Floods)

Source: NDMP



Map 1.4 Flood Hazard Map of Pakistan



Pakistan has a long latitudinal extent with very high the rainfall variability which makes droughts an intermittent phenomenon in the Country. In recent years, droughts are reported to have brought extensive damage to Balochistan, Sindh and Southern Punjab where average annual rainfall is as low as 200-250 mm. Drought differs from other natural disasters in effects which often accumulate slowly over a considerable period of time and may linger on for years even after the termination of the event. Because of this, drought is often referred to as a “Creeping Phenomenon.” The impacts of drought are less obvious and are spread over larger geographical areas. - (PMD, 2006, *National Plan for Multi-Hazard Early Warning Systems*).

Major Past Events (Drought)

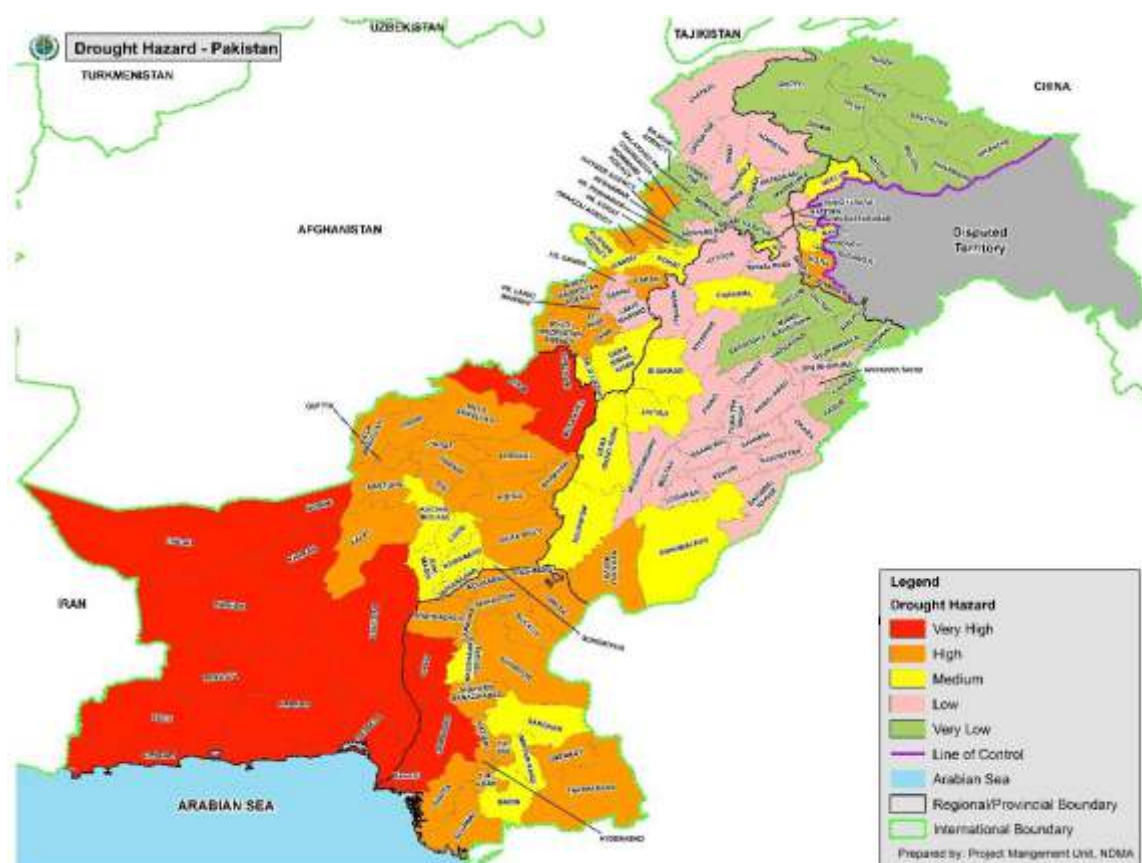
Year	Deaths	Number of Affectees	Districts Affected
1997-2002	145	3.3 Million	23

Table 1.6 Major Past Events (Drought)

Most Vulnerable Districts

Province	Districts
Balochistan	Sever - Awaran, Gawader, Kech, Kharan, Nushki, Panjgure and Washuk Moderate - Chaghi, Killah Abdullah and Pishin
KP	Chitral
Punjab	Sever - Bahawalnagar, Bahawalpur, Bhakkar, D G Khan, Muzafargarh, Rajanpur and R Y Khan Moderate - Attock, Chakwal, Jhelum, Khushab, Layyah and Mianwali
Sindh	Sever -Dadu, Jamshoro, kambar-Shahdad kot, Kharparkar and Umerkot Moderate -Badin, Benaziabad, Karachi, Khairpur, MP Khasand Thatta

Table 1.7 Most Vulnerable Districts

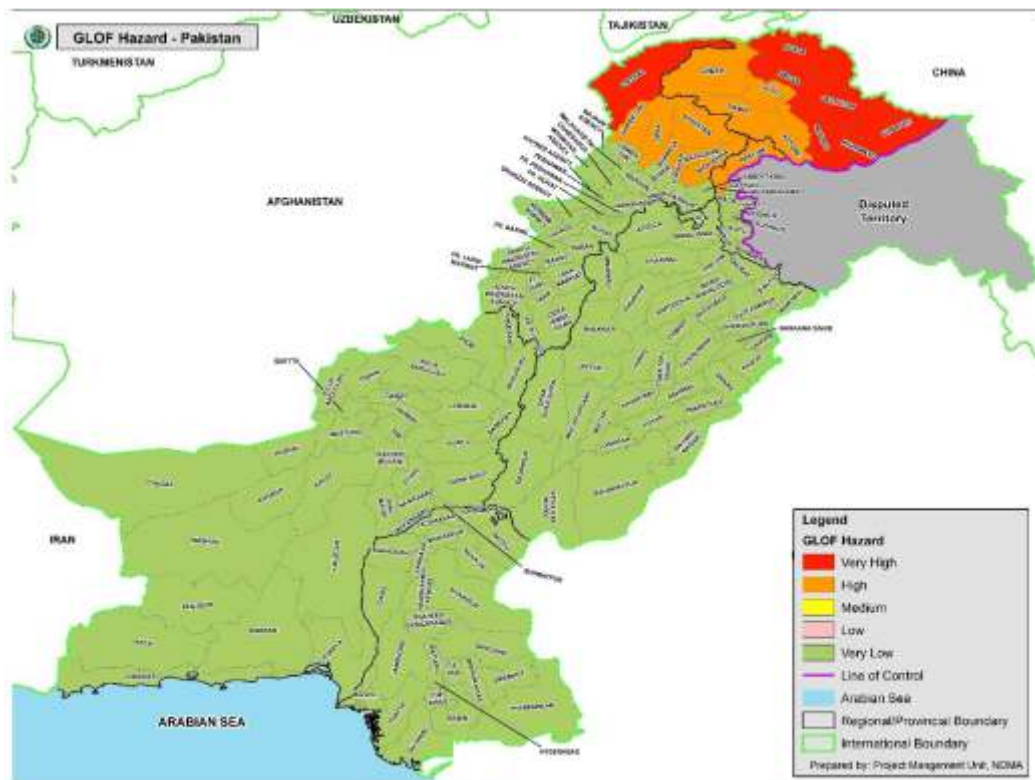


Map 1.5 Drought Hazard Map of Pakistan



Glacial Lake Outburst Floods

The bursting of Glacial Lakes in the upstream reaches of the Indus River basin, a phenomenon termed as GLOF (Glacial Lakes Outburst Flooding), is one of the natural disasters in Pakistan. In particular, the Karakoram Region is noted for the destructive effects of GLOFs from naturally dammed lakes. The lower parts of large glaciers in the Upper Indus River Basin can severely disrupt and modify river courses in the valleys below. In case of GLOF, slides and debris torrents are large enough to dam rivers.



Map 1.6 GLOF Hazard Map of Pakistan



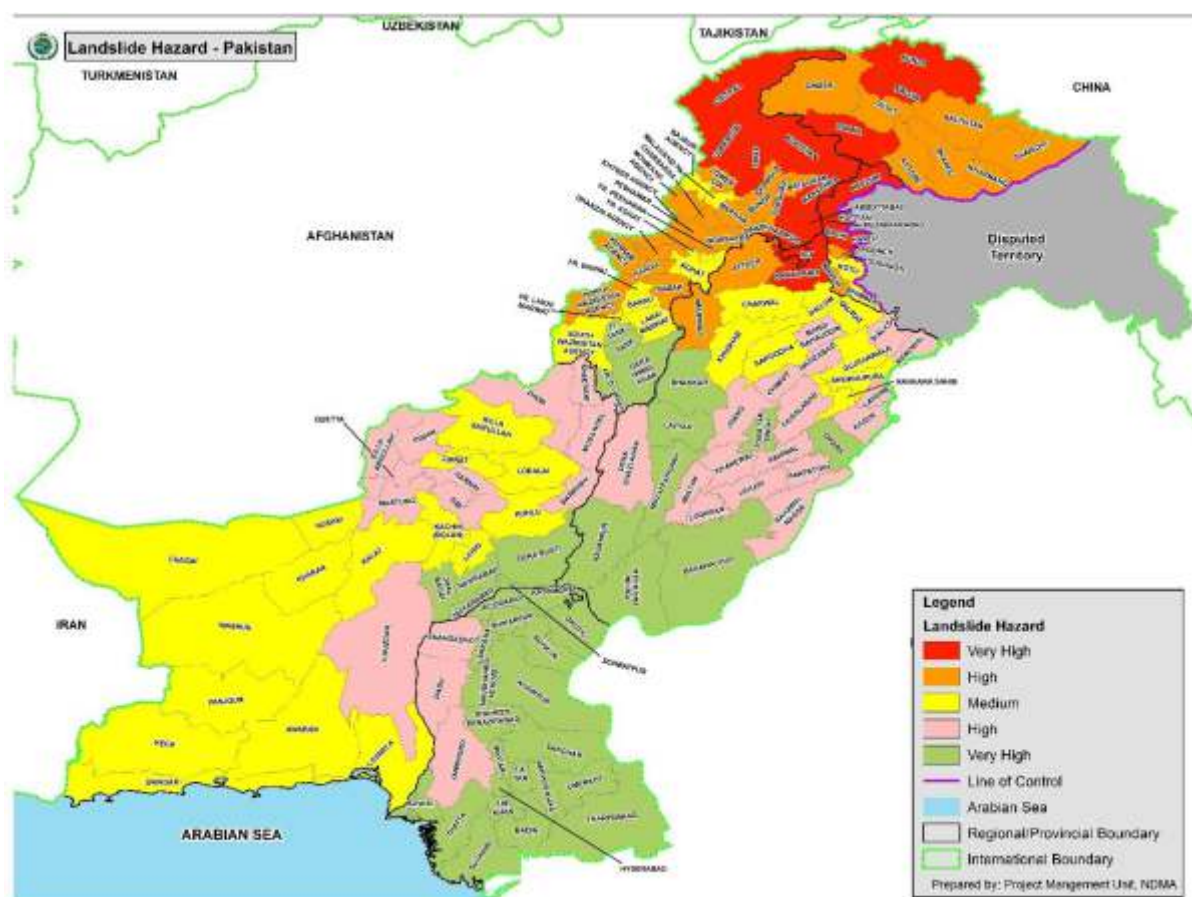
Landslide/ Sediments

Pakistan is at considerable risk to sediment disasters. Sediment disasters are defined as the phenomena that cause direct or indirect damage to lives and property through a large-scale movement of soil and rock. Sediment disasters are likely to occur in mountainous areas of Pakistan, due to the particular organic phenomena and downspouts resulting in destabilization of the slope. Sediment disasters occur after heavy rains which weaken the soil/ ground. In particular, the northern regions of Pakistan (GB, AJ&K and KP) are vulnerable to landslides because of their steep hilly/ mountainous topography.

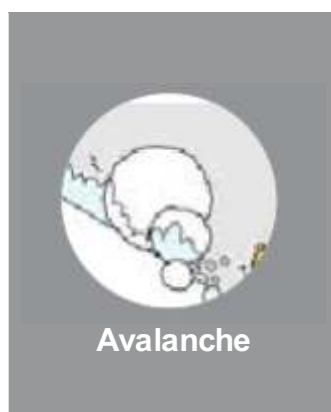
Major Past Events (Landslides/ Rockfall)

Year	Area	Deaths	No Affected
2010	Attabad (GB)	18	1285
2005	Hattian Bala (AJ&K)	1,000	3,600

Table 1.8 Major Past Events (Landslides/ Rockfall)



Map 1.7 Landslide Hazard Map of Pakistan

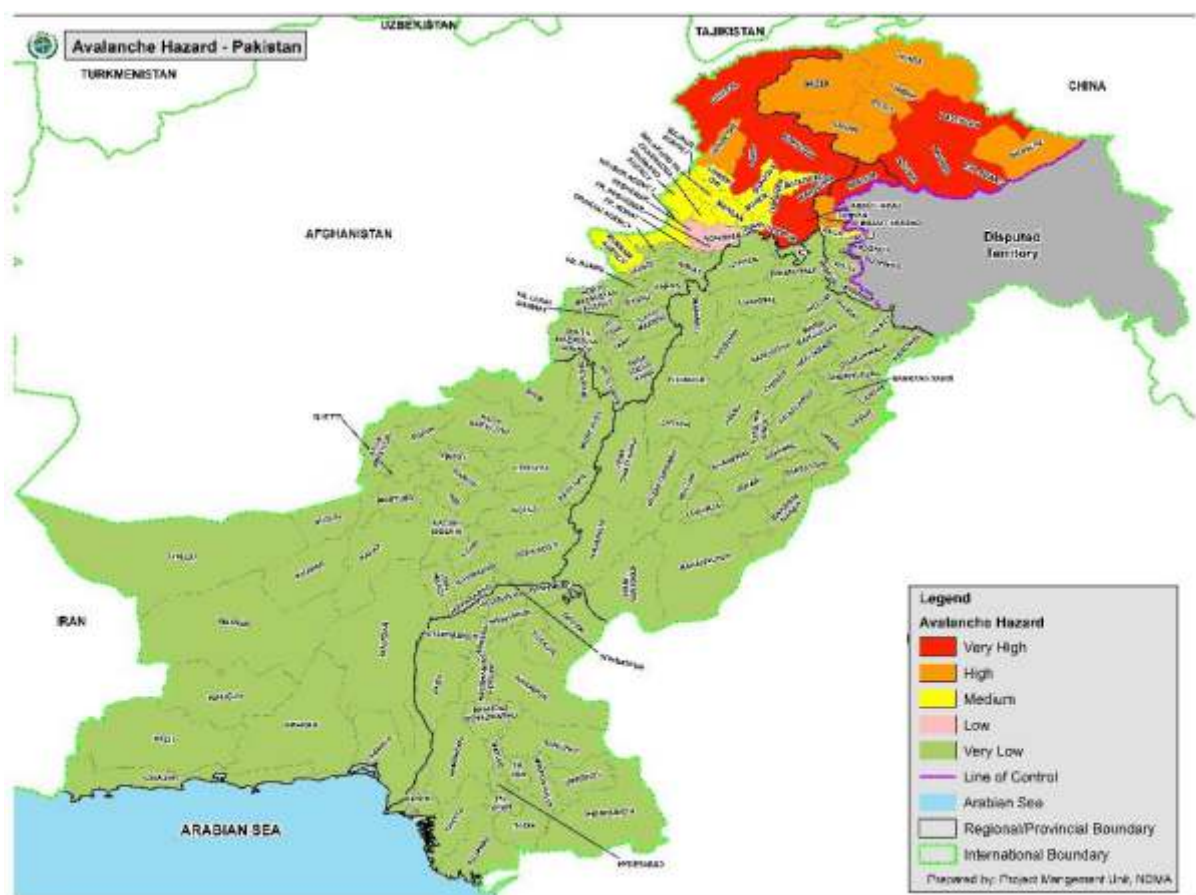


GB and Kashmir regions and northern parts of KP experience avalanches on seasonal basis. Local communities surrounding the avalanche prone areas are vulnerable to this disaster. Avalanches are a kind of local natural disaster and their impact is localized to the communities living nearby or in areas where avalanches happen on a regular basis. Therefore, the impact of avalanches are minimal.

Most Vulnerable Districts (Avalanche)

Province	Districts
KP	Chitral and Kohistan
AJ&K	Neelum and Hattian Bala
Gilgit Baltistan	Astore, Gilgit, Ghanche, Ghizer and Skardu

Table 1.9 Most Vulnerable Districts (Avalanche)



Map 1.8 *Avalanche Hazard Map of Pakistan*



Cyclones

Cyclones have caused large-scale damage to the Coastal Areas of Pakistan. The Coastal Belt of Pakistan, especially in Sindh, is highly vulnerable to tropical Cyclones associated with Storm Surges. The Climate Changes result in increase in frequency, intensity and changes in tracks of storms.

Major Past Events (Cyclones)

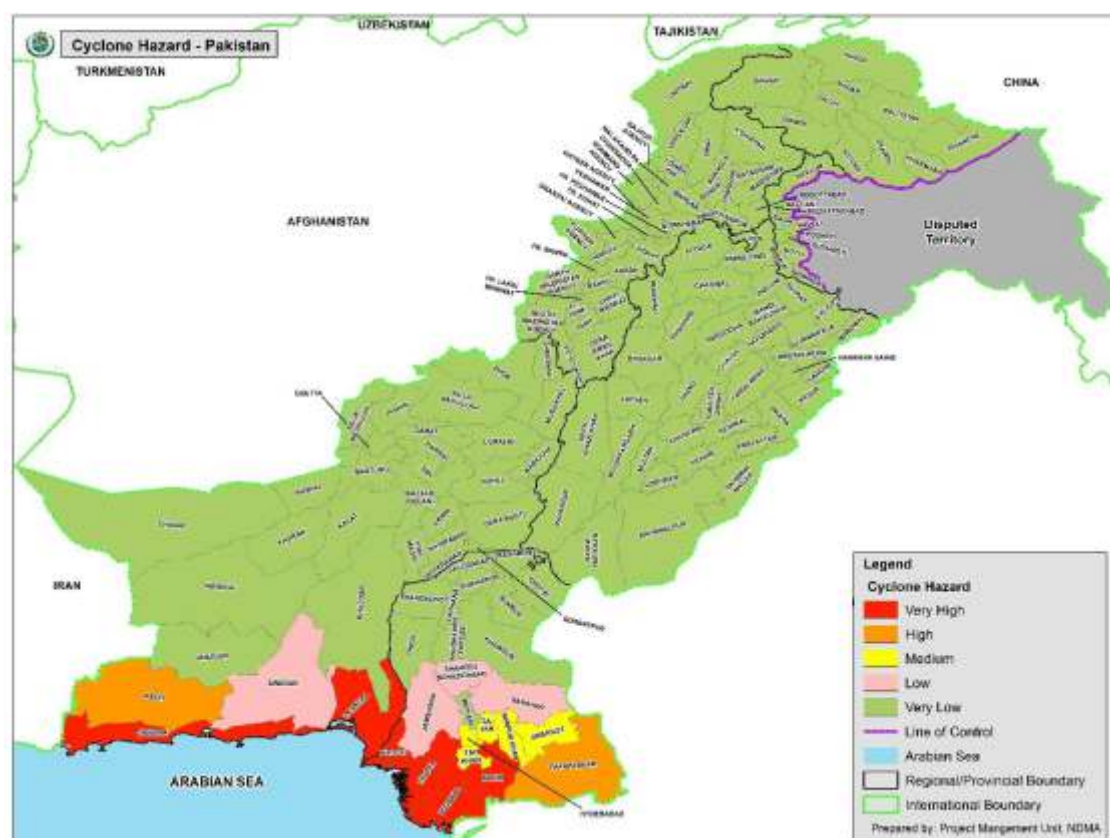
Year	Death	No Affected	Districts Affected
2010	15	0.2 million	Balochistan - 30 and Sindh - 3
2007	Balochistan - 380 and Sindh - 250	1.5 million	Balochistan - 10 and Sindh - 4
1999	202	0.6 million	Thatta and Badin

Table 1.10 Major Past Events (Cyclones)

Most Vulnerable Districts (Cyclones)

Province	District
Balochistan	Awaran, Gwadar, Katch and Lasbela
Sindh	Badin, Hyderabad, Karachi, Sujawal and Thatta

Table 1.11 Most Vulnerable Districts (Cyclones)



Map 1.9 Cyclone Hazard Map of Pakistan



Tsunami

Due to the tectonic setting in the Arabian Sea where the Arabian plate subducts beneath the Eurasian plate, large earthquakes along the Arabian Coast have occurred historically. However, all of the earthquakes have not generated Tsunamis. Besides earthquakes, Tsunamis can be generated by volcanic activity. 1945 Tsunami caused by Makran Subduction Zone, located 70 km from the Pakistan Coast, hit the coastal line in less than 20 minutes; however distant Tsunamis have not affected Pakistan so far.

Major Past Events (Tsunami)

Date	Time	Magnitude	Run Up (in meters)	Location
27 Nov 1945	21:56:40	8.3	15.24	Karachi, Ormara and Pasni
27 Aug 1883	02:59	Volcano	0.50	Karachi

Table 1.12 Major Past Events (Tsunami)

Most Vulnerable Districts (Tsunami)

Province	Districts
Balochistan	Gwadar and Lasbela
Sindh	Badin, Karachi and Thahatta

Table 1.13 Most Vulnerable Districts (Tsunami)



Extreme Temperature

In 2015, a severe heat wave with temperatures as high as 51 °C (124 °F) hit Pakistan, especially its southern parts. This heat wave broke the old temperature records of many cities in the country. A few cities in the province of Sindh, experienced the temperatures as high as 51.0 °C.

1.10 Human Induced Hazards in Pakistan



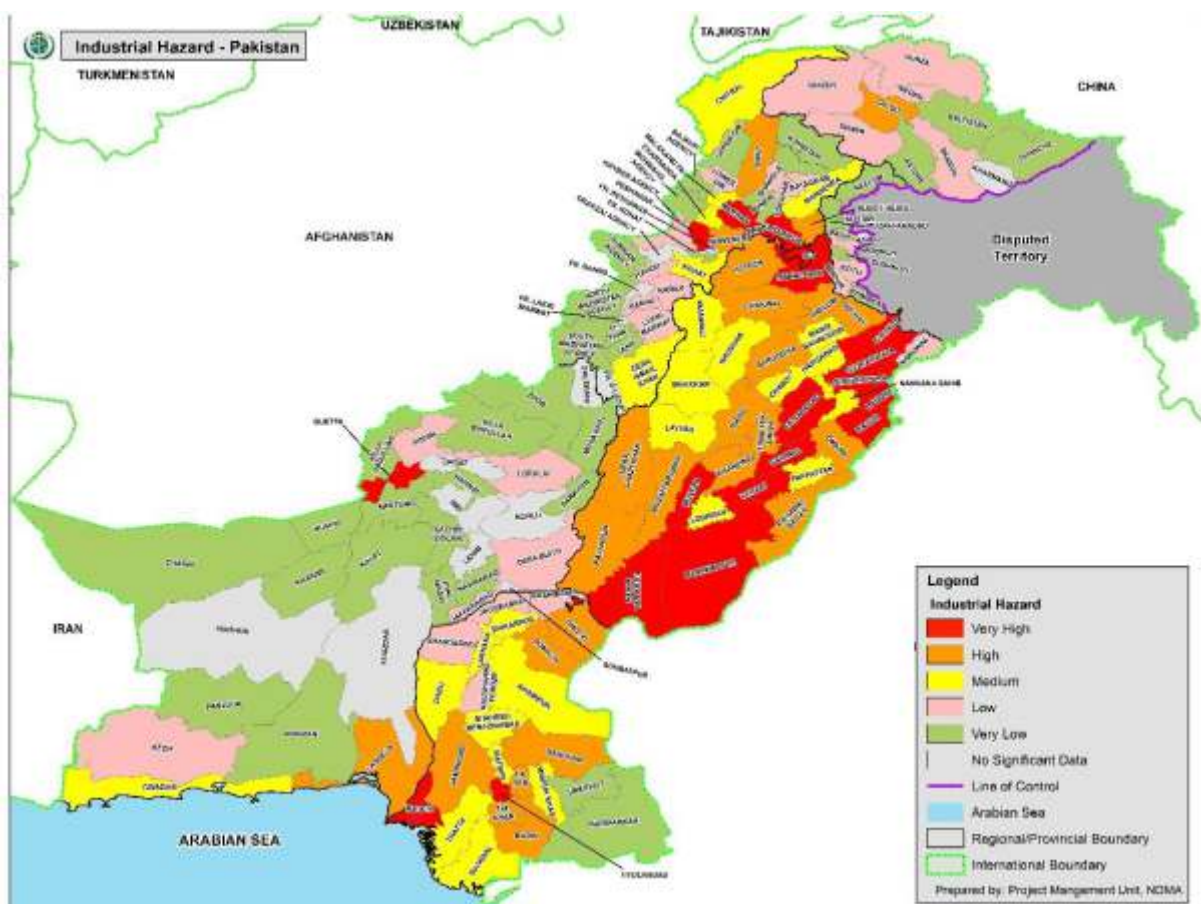
Industrial and Technical Disasters

This includes industrial incidents, Oil spills, Chemical, Biological, Radiological and Nuclear incidents. Industrial cities like Karachi, Lahore, Faisalabad, Gujrat, Gujranwala and Sialkot are prone to industrial disasters. The Chemical Industry faces the potential threat of disasters because of possible explosions. Pakistan's ports



Industrial and Technical Disasters

are at risk from marine accidents. In July 2003, in Karachi, the wreckage of Tasman Spirit, an old Greek Ship caused colossal environmental losses and health hazards for the businesses, port workers and adjacent communities. About 28,000 tons of oil spilled all over the harbor area, which adversely affected marine life. The residents in the area reported headaches, nausea and respiratory problems in the weeks following the accident. It took months for the authorities to clear the oil affected areas.



Map 1.10: Industrial Hazard Map of Pakistan



Fires (Urban and Forest)

There has been a significant migration from rural to urban areas during last two decades, which has put a lot of pressure on the urban areas of Pakistan thereby creating more slum areas in the cities. In addition, there is a lot of construction activities taking place without following/ abiding by the Building Codes. Over and above, mushrooming of unplanned CNG gas filling stations in urban areas and unauthorized LPG Stores are quite common. The sale of petroleum products in the residential areas is also



Fires
(Urban and Forest)

widespread in the cities. These practices pose major Fire Risk in Urban Areas. While the risk of fire exists in all dwellings, the cities with more industrial units, CNG stations/ petrol Pumps, godowns are comparatively more fire prone.

Moreover, Pakistan has different types of Forests, ranging from Mangroves in the south to Alpine vegetation in the north. Out of all these types, sub-tropical broad leave ever green scrub forest and sub-tropical (Chir) Pine are the most fire prone Forests. Forests are also often put on fire by locals for employment/ job purpose.



Accidents

Transport accidents includes both Land and Air accidents. Road accidents, are common in Pakistan. The major reasons for this are poor road conditions, single road tracks, and unsafe driving practices. In 2017, a tanker truck exploded in Bahawalpur District, killing 219 people and injuring at least 34 others.

1.11. Factors Contributing to Vulnerabilities

1.11.1 Population Growth. The population of Pakistan has grown by 361 percent since 1947. The growth of population has negatively affected the Socio-economic development of the country resultantly most of the population has settled in the areas that are more vulnerable to various of hazards like Floods (Riverine & Flash), Fires, GLOFs, Landslides, Avalanches, and Epidemics.

1.11.2 Unplanned Industrialization and Migration. Rural to Urban areas migration has resulted in the uneven growth of Urban Centers in Pakistan. Changes in consumption patterns, lifestyles and demand for better services has led to increased pressure on Natural resources. Growing industrialization requires more water, timber, and other natural resources. All this has increased stress on natural resources manifold and degraded the environment through cutting of trees, land erosion, which is the main cause of landslides, depletion of groundwater, and industrial waste pollution in the Rivers and Sea.

1.11.3 High Dependency on Agriculture and Livestock. Agriculture and livestock are main sources of income particularly in floods and drought prone areas of Pakistan as there is no visible diversity in their livelihoods. Therefore, the impact of Floods and Drought is very high for these communities. When they are hit by any disaster, their recovery takes unusually longer time. Disaster-impact-assessment studies indicate that these communities suffer more from Floods because of agriculture-based livelihoods.

1.11.4 Poverty in Hazard-Prone Areas. Poverty is one of the major factors contributing to the vulnerability, under development and exposing communities to disasters. Poverty reduces the capacities of the communities to resist, mitigate and respond to hazard. Absence of safety nets and limited access to assets, shrinks the people's capacity to sustain the brunt of disasters. The poor living in hazard-prone areas are badly exposed to disaster affects in one way or the other.

1.11.5 Lack of Institutional Capacity to Deal with Disaster Risk Reduction. Institutional capacity of different government departments/ agencies is quite limited to deal the disasters, particularly at District levels. Lack of coordination between Response Agencies at Federal /Provincial level and limited Early Warning System are the main grey areas. There is a lack of focus on preparedness because of the capacity and scarcity of resources. All these factors ultimately increase the vulnerability of local population to different disasters.

1.11.6 Climate Change and Its Impacts. Global warming is causing severe damage to the Natural Environment. The impact includes losses in biodiversity, rise in the sea level, frequent cyclones, drought and abnormal shifts in the weather pattern. As a result, increased flooding changes the freshwater supply and increase severe weather events. This can also lead to the alteration of forest and crop yields.

1.11.7 Land Use Planning. The vulnerabilities in different regions of the country for various hazards are absolutely distinct. The main reasons are: growing urbanization, mushrooming of slum areas and lack of implementation Civic Laws. In the Flood Plains, people have occupied River/ Nullah beds and blocked natural drainage system (*Nullahs/ Water Channels*) thus making themselves vulnerable to all type of floods. Moreover, communities occupying seismological active zones are vulnerable to the effects of



Earthquakes. Furthermore, due to over population, agricultural lands and green/ vegetated areas are being converted to residential areas (concrete jungles); thus, deforestation is causing river erosion etc which is further increasing vulnerability to floods.



SECTION-2

HUMANITARIAN STRUCTURE IN PAKISTAN



Humanitarian Structure in Pakistan

The institutional systems for disaster management are based on a review of the National Disaster Management Act 2010 and discussions with relevant stakeholders.

2.1 Evolution of Disaster Management Systems.

The West Pakistan National Calamities Act of 1958 and Civil Defence Act-1952 provides for the maintenance and restoration of order in calamities affected areas by relief against such calamities and focuses on emergency response. Based on the Act, an Emergency Relief Cell was created within the Cabinet Division in 1971 and was responsible for disaster relief at the national level. It provided assistance in cash and kind to supplement the resources of the Provincial Government and administered the Prime Minister's Flood Relief Fund.

In the backdrop of Earthquake 2005, the National Disaster Management Ordinance (NDMO) was promulgated in 2006, which after approval by Parliament became the National Disaster Management Act in 2010. The National Disaster Management Commission (NDMC) headed by the Prime Minister was established to expedite the

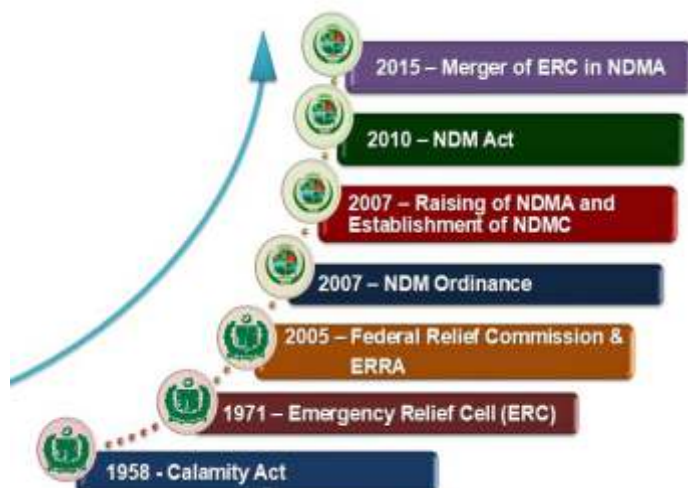


Figure 2.1: Evolution of Disaster Management System

formulation of overall policies at the national level. The National Disaster Management Authority (NDMA) is the lead agency for disaster management at the Federal level to provide technical guidelines to Federal and Provincial level Organizations on formulation of Plans, Strategies and Programs for disaster management. Chairman NDMA acts as secretary of the NDMC. On 26 October 2011, the Government of Pakistan placed NDMA under the newly established Ministry of National Disaster Management which was later renamed as Ministry of Climate Change (MoCC) on 18 April 2012. In March 2018, the Government decided to put the National Disaster Management Authority directly under the Prime Minister's Office with an aim to remove bureaucratic hiccups and improve efficiency/ effectiveness of the Authority.

Pakistan has three tiered disaster response authorities i.e. Federal, Provincial and District. At the Provincial/ State level, the Provincial/ State Disaster Management Authorities (P/G/S/ DMAs) are the lead agencies for disaster management. Similar to the National level, the Provincial Disaster Management Commission (PDMC) is headed by the Chief Minister (or Prime Minister in case of AJ&K) of the respective Province who acts as Chairman of the Commission. At the District level, the District Disaster Management Authorities (DDMAs) are established.

2.2 National/Provincial Disaster Management Authorities

2.2.1 Establishment/Raising of NDMA. After the promulgation of NDMO 2006, Government of Pakistan established National Disaster Management Authority (NDMA) to serve as the focal agency and coordinating body to facilitate the implementation of disaster management in Pakistan. NDMA is headed by a Chairman who is appointed by Federal Government. NDMA is responsible for all activities related to disaster management at National level.

2.2.2 Provincial/ Regional/ State Disaster Management Authority. These authorities were created at different times and are headed by a Director General appointed by the respective Provincial Governments. These authorities are responsible for coordinating with ministries, departments and Districts for disaster risk management activities in their respective areas. These authorities are also responsible for implementing Policies and Plans for emergency response in their respective areas.

2.2.3 District/ Agencies Disaster Management Authorities/ Units. These authorities have been established in all the Districts/ Agencies across Pakistan for responding to disasters/ emergencies at local/ District level.

2.3 Functions of Disaster Management Authorities

2.3.1 National Disaster Management Authority (NDMA)

- a. Act as the implementing, coordinating and monitoring body for disaster management.
- b. Prepare the National Plan to be approved by the National Commission.
- c. Implement, coordinate and monitor the implementation of the National Policy.



- d. Lay down guidelines for preparing disaster management Plans by different Ministries or Departments and the Provincial Authorities.
- e. Provide necessary technical assistance to the Provincial Governments and the Provincial Authorities for preparing their disaster management Plans in accordance with the guidelines laid down by the National Commission.
- f. Coordinate Response in the event of any threatening disaster situation or disaster.
- g. Lay down guidelines for, or give directions to the concerned Ministries or Provincial Governments and the Provincial Authorities regarding measures to be taken by them in response to any threatening disaster situation or disaster.
- h. For any specific purpose or for general assistance requisition the services of any person and such person shall be a co-opted member and exercise such power as conferred upon him by the Authority in writing.
- i. Promote general education and awareness in relation to disaster management
- j. Perform such other functions as the National Commission may require it to perform.

2.3.2 Provincial Disaster Management Authorities (PDMAs)

- a. Formulate the Provincial disaster management Policy obtaining the approval of the Provincial Commission.
- b. Coordinate and monitor the implementation of the National Policy, National Plan and Provincial Plan.
- c. Examine the vulnerability of different parts of the Province to different disasters and specify prevention or mitigation measures.
- d. Lay down guidelines to be followed for preparation of disaster management plans by the Provincial Departments and District Authorities.
- e. Evaluate preparedness at all governmental or non-governmental levels to respond to disaster and to enhance preparedness.
- f. Coordinate response in the event of disaster.
- g. Give directions to any Provincial department or authority regarding actions to be taken in response to disaster.



- h. Promote general education, awareness and community training in this regard.
- i. Provide necessary technical assistance or give advice to district authorities and local authorities for conveying out their functions effectively.
- j. Advise the Provincial Government regarding all financial matters in relation to disaster management.
- k. Examine the construction in the area and if it is of the opinion that the standards laid down has not been followed may direct the same to secure compliance of such standards.
- l. Ensure that communication systems are in order and disaster management drills are being carried out regularly.
- m. Perform such other functions as may be assigned to it by the National or Provincial Authority.

2.3.3 District Disaster Management Authorities DDMA/Units (DDMA)

- a. Prepare a disaster management plan including district response plan for the district.
- b. Coordinate and monitor the implementation of the National Policy, Provincial Policy, National Plan, Provincial Plan and District Plan.
- c. Ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of its effects are undertaken by the departments of the Government at the district level as well as by the local authorities.
- d. Ensure that the guidelines for prevention, mitigation, preparedness and response measures as laid down by the National Authority and the Provincial Authority are followed by all departments of the Government at the district level and the local authorities in the district.
- e. Give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary.
- f. Lay down guidelines for preparation of disaster management plans by the departments of the Government at the districts level and local authorities in the district.

- g. Monitor the implementation of disaster management plans prepared by the Departments of the government at the district level.
- h. Lay down guidelines to be followed by the Departments of the Government at the district level.
- i. Organize and coordinate specialized training programmes for different levels of officers, employees and voluntary rescue workers in the district.
- j. Facilitate community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, governmental and NGOs.
- k. Set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public.
- l. Prepare, review and update district level response plan and guidelines.
- m. Coordinate with and give guidelines to local authorities in the district to ensure that pre-disaster and post-disaster management activities in the district are carried out promptly and effectively.
- n. Review development plans prepared by the Departments of the Government at the district level, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster or mitigation.
- o. Identify buildings and places which could, in the event of disaster situation be used as relief centers or camps and make arrangements for water supply and sanitation in such buildings or places.
- p. Establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice.
- q. Provide information to the Provincial Authority relating to different aspects of disaster management.
- r. Encourage the involvement of NGOs and voluntary social-welfare institutions working at the grassroots level in the district for disaster management.
- s. Ensure communication systems are in order and disaster management drills are carried out periodically.
- t. Perform such other functions as the Provincial Government or Provincial authority may assign to it or as it deems necessary for disaster management in the District.

2.4. Role and Functions of Partners

2.4.1 Armed Forces. The Armed Forces have always played a vital pivotal role in emergency management in the country. The roles of Armed Forces in disasters spans from Relief/ Rescue operations to Recovery and Rehabilitation. However, in complex emergency scenarios and at time where security situation warrants, Armed Forces have been involved in Recovery and Reconstruction too. The Armed Forces, are considered suitable for such operations due to organisation strength, well trained HR and operational equipment/ resources held with them.

As per NDM Act 2010, National Disaster Management Authority (NDMA) is empowered to call upon services of Armed Forces, Civil Armed Forces or any other person for the purpose of disaster management {chapter V, section 23 (c) read in conjunction with section 1 (f)}. The employment of Armed Forces including various assets will be determined by NDMA as per the requirement/ situation. The responsibilities which can be assigned to Armed Forces can be summarized as under:-

- a. Support disaster management authority in preparing Contingency Plans.
- b. Conduct rescue, relief and evacuation operations in conjunction with disaster management authorities.
- c. Provide available resources/ equipment like Helicopters, Airplanes, Ships & Machinery etc for disaster response .
- d. Assist the disaster management authorities in setting up Camps/ Tent Villages and organize Medical Camps in close coordination with relevant Health Ministry/ department.
- e. Support disaster management authorities in conduct of assessment (situation/ damages etc).
- f. Support disaster management authorities in Recovery and Reconstruction Phase or / and conduct Recovery and Reconstruction independently where necessary.
- g. Provide security during the disasters, if required.

Armed Forces can also play a major role with regards to Disaster Risk Reduction (DRR) by ensuring implementation of rules/ regulation with the Armed Forces system. Moreover, institutions like National Defense University (NDU), Command and Staff College (C&SC) and

other respective training institutes can also be utilized in educating Armed Forces personals regarding Disaster Risk Reduction, Management and Mitigation processes.

For the purpose of coordination between the Armed Forces and DMAs at National, Provincial and District Levels a mechanism exists, whereby a disaster management/ relief cell has been established in Joint Staff Headquarters and all Services Headquarters. NDMA Ops Wing coordinates the employment of Armed Forces through these cells. Likewise the similar set up exists at Provincial and District level.

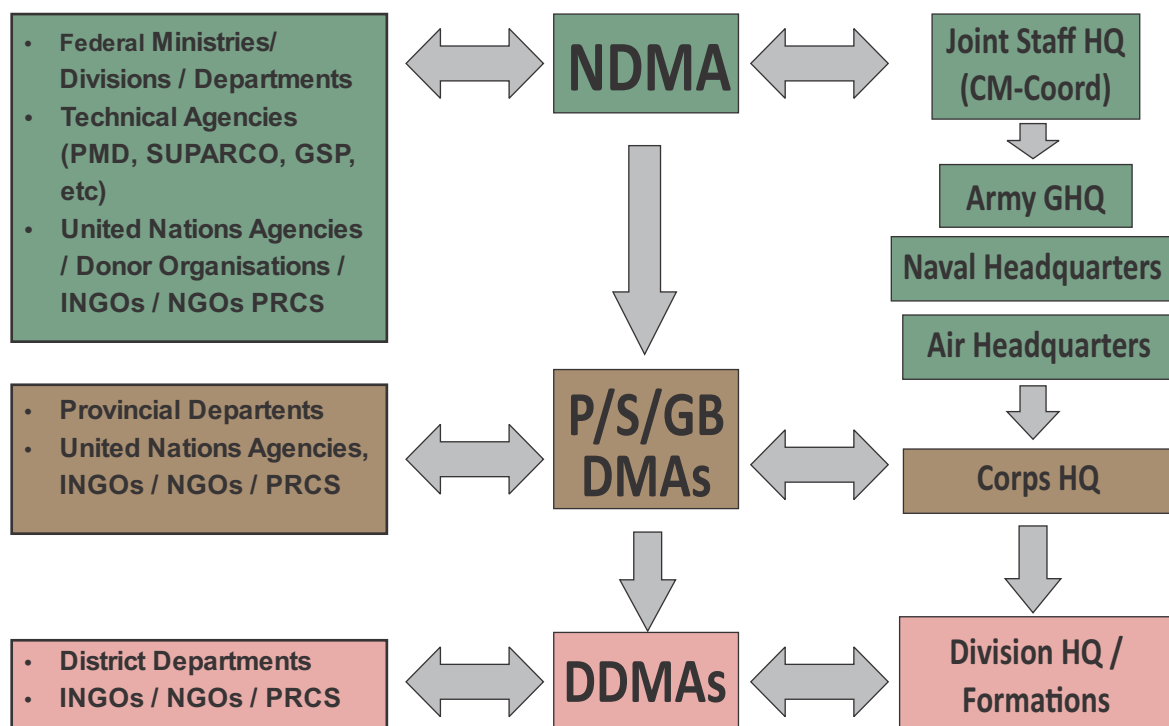


Figure 2.2: Civil Military Coordination Mechanism for Disaster Management

2.4.2 Provincial Relief Department. The Relief Commissioner is responsible for coping with any disaster situation in the province. Funds remain at the disposal of the Relief Commissioner which are released to the District administration for provision of facilities to affectees as per the rate of compensation for casualties, houses/ crop damages proposed by Provincial technical committees headed by the Relief Commissioner. All relief items, goods, cash and grants are distributed by the district administration through the district Damage Assessment Committee which includes officers from the line agencies, representatives of District and Tehsil Councils and members of local NGOs.

2.4.3 Fire Fighting Services. The main function of the Fire Fighting Services is to “extinguish fire”. The Municipal Civic authorities at Tehsil level are responsible for the

provision of firefighting services in respective administrative boundry.

2.4.4 Civil Defence. The Civil Defence Department was established through an ordinance in 1951. It is now governed through the Civil Defence Act 1952. Before 1993, it was mandated to, ***“Take measure not amounting to actual combat, for affording defence against any form of hostile attack by a foreign power or for depriving any form of hostile attack by a foreign powers of its effects, wholly or in part, whether such measures are taken before during or after the time of attack”***. However, after some time, it was assigned the additional task to take remedial measures against Natural or Human induced disasters during peace. The main function of the civil defence is to:-

- a. Assist local administration/ Army in rescue, relief and evacuation measures.
- b. Form Search & Rescue teams and train them in each Province/ District of the Country.
- c. Organize training/ refresher training and Simulation Exercises for Government departments, Youth in Colleges/ Universities and Volunteers on Search and Rescue missions and First Aid.
- d. Organize training on Bomb Disposal/ reconnaissance to the personnel of Armed Forces, Police and all other concerned agencies.
- e. Develop a database of volunteers at District/ Agency Headquarters, Tehsil and UC levels and organize trainings (Search and Rescue / First Aid)
- f. Organize trainings on Firefighting for Government Staff and volunteers at District and Tehsil level.
- g. Create community awareness of Public Safety Organisations.

2.4.5 Pakistan Red Crescent Society (PRCS). PRCS has contributed widely to disaster response in Pakistan with the support of other National Societies. **It primarily works in Disaster Preparedness and Response** and contributes significantly in providing Relief, Recovery, Reconstruction and Capacity Building activities. Presently it is working in 80 Districts of Pakistan and AJ&K; it has a Core Staff of nearly 1,000 personal. Presently, PRCS has a huge network of apporxmiately 50,000 Volunteers.

2.4.6 Emergency Services. Emergency Services are operational in all Provinces and are responsible for responding to and handling various emergencies, including Fire Emergencies. These services are euipped with Ambulance(s) and technical equipment.

2.4.7 Local Charity Organizations. The local charity organizations like Edhi Foundation etc provide various services, particularly Ambulance Services, evacuation, distribution of food and nonfood items during small to largescale disasters in the Country.

2.4.8 Civil Society/ Philanthropist Organisations. NGOs, Philanthropists and CBO's play an important role in augmenting the Government's efforts for disaster management and provision of Relief Services to sustain life, reduce physical and emotional distress and promote/ facilitate recovery of disaster victims. They can also play an important role in dissemination of Early Warning, Evacuation, First Aid, Search & Rescue and Firefighting etc.

2.4.9 Humanitarian Networks (NHN and PHF). The National Humanitarian Network (NHN) and Pakistan Humanitarian Forum (PHF) are working as the coordinating bodies for National and International Organisations respectively for delivering humanitarian assistance in coordination with the NDMA.

2.4.10 Scout Associations, Volunteers and Surge Emergency Response Teams (SERT). Volunteers of Pakistan Boys/ Girls Guides Associations, newly established Surge team comprising of sectoral experts and volunteers from various fields can be employed to suppliment the Disaster Response efforts being undertaken by the Government across the Country.

2.4.11 Media. The media plays an important role in saving lives and property before, during and after the disaster through dissemination of important information on/for Preparedness, Early Warnings and Disaster Response (*situation update covering stranded communities/ missing people, search & rescue/ evacuation, survivor needs, health messages to prevent communicable diseases etc*). Media can also be of great help in coordinating operations of varioius Agencies/ Organisations.

2.4.12 United Nations (UN) Agencies/ Clusters. UN Agencies play a key role in disaster management especially in Assessment, Planning, Coordination, Response, Recovery and longer term Disaster Risk education programme. UN takes a lead role in establishing the Inter Agency Standing Committee (IASC) to organize and coordinate periodic meetings of UN and INGOs to monitor Response of various agencies. Moreover, the UN Agencies plays an important role in capacity building of Public Sector in Policy formulation, providing technical support to Provinces and Districts for disaster management plannings.

Clusters are activated by UN Agencies in the backdrop of National level calamity. Clusters are groups of humanitarian organizations, both UN and non-UN, in each of the main Sectors of humanitarian action e.g. water, health and logistics. They are designated by the Inter-Agency Standing Committee (IASC) and have clear responsibilities for coordination. The Cluster Approach was applied for the first time following the Earthquake - 2005 in Pakistan. Nine clusters were established within 24 hours of the Earthquake. The aim of the cluster approach is to strengthen system-wide preparedness and technical capacity to respond to humanitarian emergencies and provide clear leadership and accountability in the main areas of humanitarian response. At country level, it aims to strengthen partnerships and the predictability and accountability of international humanitarian action, by improving prioritization and clearly defining the roles and responsibilities of humanitarian organizations.

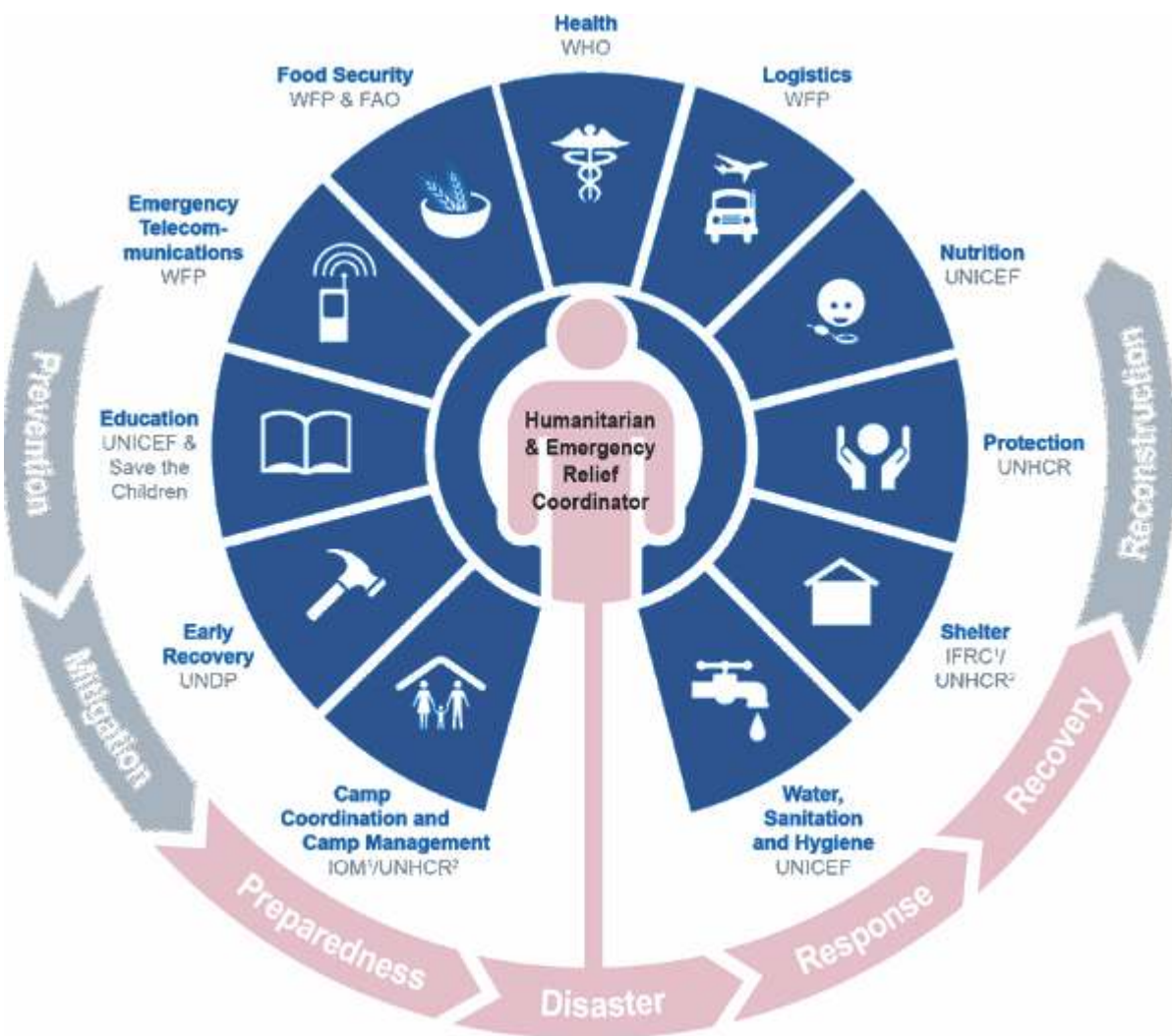


Figure 2.3 UN Cluster System

2.4.13 Federal Ministries, Departments and Authorities.

In the light of Clause 7 of the NDM Act 2010, ***NDMA is mandated to lay down guidelines for or give directions to the all concerned Ministries/ Departments/ Authorities at all levels regarding measures to be taken by them in Response to any threatening disaster situation or disaster.*** List of key Federal Ministries/ Departments/ Authorities having important role for Disaster Response, is given below:-

Federal Ministries	Federal Departments and Authorities
a. Ministry of Defence	a. Pakistan Armed Forces
b. Ministry of Interior	b. Pakistan Meteorological Department (PMD)
c. Ministry of Foreign Affairs	c. Civil Aviation Authority (CAA)
d. Ministry of Communications	d. Federal Flood Commission (FFC)
e. Ministry of Climate Change	e. Geological Survey of Pakistan (GSP)
f. Ministry of Finance, Revenue and Economic Affairs	f. Survey of Pakistan
g. Ministry of Planning, Development and Reform	g. Indus River System Authority (IRSA)
h. Ministry of National Food Security and Research	h. National Database and Registration Authority (NADRA)
i. Ministry of Housing and Works	i. National Highway Authority (NHA)
j. Ministry of Human Rights	j. National Logistics Cell (NLC)
k. Ministry of Industries and Production	k. Pakistan Coast Guard
l. Ministry of Information, Broadcasting, National History and Literary Heritage	l. Pakistan Commissioner for Indus Waters (PCIW)
m. Ministry of Information Technology & Telecommunication	m. Pakistan Housing Authority
n. Ministry of Law and Justice	n. Pakistan Public Works Department
o. Ministry of Energy	o. Pakistan Railways
p. Ministry of Maritime Affairs	p. Police Service of Pakistan
q. Ministry of Railways	q. Press Information Department (PID)
r. Ministry of National Health Services, Regulations and Coordination	r. Space and Upper Atmosphere Research Commission (SUPARCO)
s. Ministry of Science and Technology	s. Water and Power Development Authority (WAPDA)
t. Ministry of Water Resources	





SECTION-3

ACTIVATION OF NDRP



Activation of National Disaster Response Plan

3.1 Declaration of Emergency. The declaration of emergency depends upon the **nature and magnitude of the disaster**. Disaster situations of a smaller scale which are within the capacity of District authorities would be managed by the respective District Authorities on the declaration of emergency by the Province. In case of disaster situation of a relatively larger scale which overwhelms the capacities of District Governments / Authorities but are within the capacities of Provincial Governments / Authorities to manage shall be declared by the Province. In case of disaster situation of a larger scale that overwhelms the capacities of Provincial Governments / Authorities but are within the capacities of Federal Government to manage primarily through National resources would be declared by the Federal Government as National Emergency. However, international assistance can be requested by the Government in case of disaster situation is of mega scale when the National capacities are overwhelmed.

3.2 Criteria for Declaring an Area Calamity Affected. As per the National Calamities Act- 1958, if more than 50% loss of livelihoods of the affected population has occurred the District and Provincial Authority declares the area “**Calamity Affected**”. Normally, a technical committee is formed to assess the situation after a relief phase and make recommendations to Prime Minister for the National calamity and to the Chief Minister for Provincial calamity for declaring the area calamity-affected.

3.3 Basic Criteria for Declaring Emergency. Following are some of the important considerations for declaring an emergency:-

- a. Loss of human lives.
- b. Loss of property.
- c. Loss of livelihoods.
- d. Loss of agriculture (crops/ fruit trees).
- e. Loss of livestock/ fodder.
- f. Loss of storage foods.
- g. Severe damage to infrastructure.
- h. Mass displacement.

3.4 Actions for Emergency Response

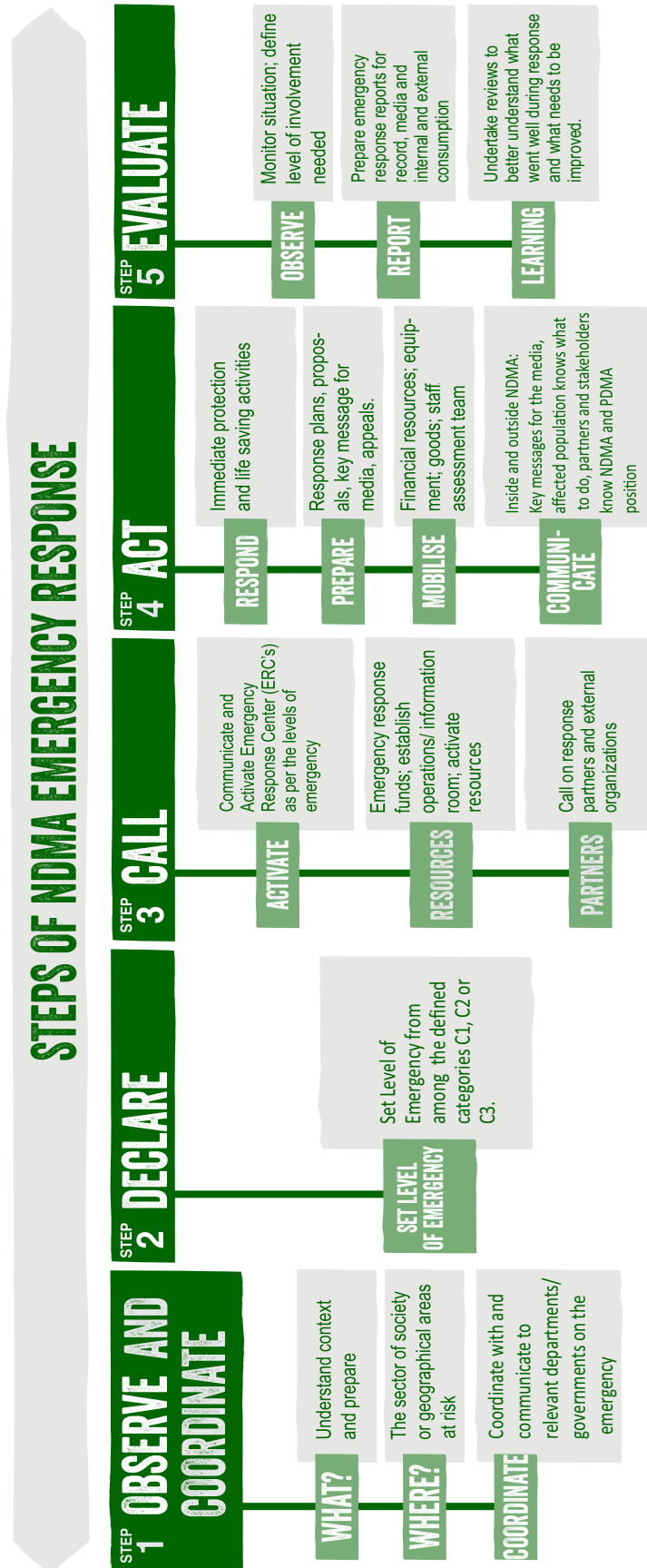


Figure 3.1: Actions for Emergency Response



3.5 Categorisation of Emergency

CATEGORY 1 (C1)

Localized emergency events for example, small scale fire, landslides, flood, canal or sub canal breach, low level epidemics etc dealt by DDMA at district level. The DDMA is capable of handling the situation on its own. Emergency may be declared by District Nazim.

ACTIONS

- ☐ Activate DEOC (Lead DDMA)
- ☐ Conduct initial rapid assessment of the situation
- ☐ Declare local level emergency
- ☐ Inform PDMA about the local level emergency declaration and Support required
- ☐ Immediately initiate relief work in the affected area
- ☐ Prepare relief operation report and share it with PDMA and relevant line departments at district level

CATEGORY 2 (C2)

Emergency/disaster which overwhelms the capacity of the district disaster management authority to manage the situation, DDMA can request for assistance to the PDMC through PDMA. In this situation an emergency is declared by the Chief Executive of the Province.

ACTIONS

- ☐ Activate PEOC (Lead PDMA)
- ☐ Inform NDMA
- ☐ Alert and inform all line departments in the district
- ☐ Conduct damage and loss assessment in the affected area
- ☐ Immediately initiate relief work in the affected area Support Agency
- ☐ Share assessment report with NDMA and request for assistance for emergency operation
- ☐ Mobilize and deploy resources e.g. evacuation, SAR team, medical team etc.
- ☐ Make request to PDMC through PDMA for financial assistance
- ☐ Coordinate and facilitate CBOs and NGOs for relief operation
- ☐ Prepare relief operation report and share it with PDMA, NDMA and relevant

CATEGORY 3 (C3)

In case emergency/disaster is beyond the capacity of provincial/regional government national emergency is declared by the Prime Minister of Pakistan.

ACTIONS

- ☐ Activate NEOC (Lead NDMA)
- ☐ Alert relevant federal ministries and departments
- ☐ Support provinces/regions in conducting damage and loss assessment in the affected area
- ☐ Share assessment report with NDMC/PDMC
- ☐ Support provincial/regional and district authorities in resource mobilization for relief operation
- ☐ Provide technical support to provincial/regional and district authorities for relief operation
- ☐ Coordinate with Armed Forces at federal level for assistance
- ☐ Initiate the process of emergency declaration and notification
- ☐ Prepare situation report on regular intervals and share with PM
- ☐ NDMA request to the NDMC for financial assistance.
- ☐ Coordinate I/NGOs, UN and other international humanitarian organization, philanthropists for effective response

CATEGORY 4 (C4)

In case emergency/disaster is beyond the capacity of government at national level, Prime Minister of Pakistan may launch appeal for international assistance.

ACTIONS

- ☐ Recommendation of international assistance by Chairman NDMA
- ☐ Appeal for the assistance by the federal government.

3.6 Summary of Key Actions [Pre and During Disasters]

National Disaster Management Authority	
PRE-DISASTER	DURING DISASTER
<ul style="list-style-type: none"> a. Prepare Emergency Preparedness Plans at National level. b. Prepare hazard specific National level Contingency Plans. c. Provide technical support to Province in preparation of Contingency Plans. d. Lay down the guidelines for preparing disaster management Plans for different Ministries, Department and the Provincial Disaster Management Authorities. e. Continuous monitoring of weather/ climatic conditions and issue alerts/ advisories to all concerned. f. Provide necessary technical assistance to the Provincial Government/ PDMAs for preparing Disaster Management Plans in accordance with guidelines laid down by the National Commission. g. Prepare, review, maintain and upgrade the communication mechanisms for early warning and devise such information dissemination strategy that the information reaches the end user. h. Coordinate with PDMAs/ DDMA's for emergency stocks piles of relief material to ensure that such material is available at short notice. 	<ul style="list-style-type: none"> a. Activate NEOC. b. Manage National level incidents and support Provinces/ Districts in incident management. c. Inform/ alert concerned Federal Ministries/ Departments about the disaster/ emergency. d. Inform concerned Ministries/ Departments to join the NEOC. e. Mobilize and deploy teams e.g. search and rescue, technically skilled people (e.g. Armed Forces, USAR etc) heavy machinery, medical equipment, medicines, immediately to the affected areas. f. Mobilize and send food and non-food items to the PDMAs and DDMA's for distribution. g. Lead rapid assessment and MIRA in the affected area. h. Coordinate with relevant Ministries/ Department e.g. Armed Forces, NLC, MoFA, Pakistan Railways, NHA, PIA, PCAA, Social Welfare, Health and Education etc to prepare themselves, activate and deploy resources. i. Coordinate with PDMAs in the affected areas and provide them with the required assistance.



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| <ul style="list-style-type: none"> i. Implement, coordinate and monitor the National Disaster Response Strategy/ Policy. j. Promote general education and awareness with regards to disaster management and perform such other functions that the National Disaster Management Commission may require it to perform. k. Review and update National Plan at an appropriate interval. l. Capacity building trainings across the Country. m. Establish partnerships n. Stock taking of resources. o. Educate people about building codes and Land Use Planning. | <ul style="list-style-type: none"> necessary technical/ financial assistance for relief operation. k. Establish and maintain communications with incident command authorities to ensure a common and current operating picture regarding critical resources requirement. l. Coordinate with UN agencies, humanitarian organizations, I/NGOs for mobilizing their relief assistance. |
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Provincial Disaster Management Authority

PRE-DISASTER	DURING DISASTER
<ul style="list-style-type: none"> a. Prepare Provincial Preparedness Plans. b. Prepare Provincial disaster Response Plan, guidance can be sought from Sphere standards. c. Project minimum standards in emergency response. d. Prepare hazard specific Provincial Contingency Plans. e. Provide technical support to Districts in preparation of Contingency Plans. 	<ul style="list-style-type: none"> a. Activate Provincial Emergency Operation Centre (PEOC). b. Conduct Rapid Assessment. c. Coordinate with relevant Provincial departments for response. d. Incident management at Provincial level. e. Conduct post disaster rapid assessment and actively play role in emergency declaration notification process.

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| <ul style="list-style-type: none">f. Prepare, review, maintain and upgrade the communication mechanisms for Early Warning and devise information dissemination strategy that allows information to reach the end user.g. Establish stock piles of relief and rescue materials and or ensure preparedness to make such material available at short notice.h. Review and give feedback to disaster preparedness emergency response Plans prepared by the departments of Provincial Government.i. Identify vulnerable areas to disaster in the Province and take measures for prevention of disaster and the mitigation of its effects, and coordinate with other government department to work together to prevent and mitigate the effects.j. Prepare and update SOPs for each department at Provincial level for disaster response.k. Ensure that communication systems are in order and disaster management drills are being carried out regularly.l. Monitor preparedness at all government and non-government levels for effective response to disasters.m. Ensure that minimum standards are applied in the response.n. Settle long standing issues. | <ul style="list-style-type: none">f. Mobilize, activate and deploy resources for disaster response at Provincial/ Regional level.g. Coordinate with rescue services and Armed Forces at Provincial level to mobilize resources and deploy for effective response.h. Closely coordinate and update NDMA on disaster situation.i. Coordinate and provide necessary support and guidance to the affected Districts in the event of disaster.j. Provide timely and essential relief goods and logistics support to the affected areas of the province.k. Monitor hazards risks and vulnerable conditions within the province on regular basis and prepare Plans accordingly.l. Encourage participation and facilitate NGOs, voluntary organizations and communities in different aspects of disaster response.m. Coordinate and facilitate humanitarian organizations, UN and Private Sector/ organizations for effective response.n. Inform Public of the latest situation periodically through Print and Electronic Media. |
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- o. Prepare hazard maps and carry-out land use planning.
- p. Enforce vacation of encroached areas by vulnerable population.
- q. Clearing of River Plains, Nullahs/ Natural drainage system before Monsoon Season.
- r. Interprovincial coordination.

District Disaster Management Authority	
PRE-DISASTER	DURING DISASTER
<ul style="list-style-type: none"> a. Prepare disaster management Plans. b. Prepare Contingency Plans cover all potential hazards in the district. c. Identify areas vulnerable to disaster in the District and take measures for prevention of disaster and the mitigation of its effects. d. Organize and coordinate trainings program for DDMA team, departments and voluntary Rescue workers at District level. e. Facilitate community trainings and awareness program for prevention/ mitigation of disaster impacts with support of departments and local NGOs. f. Update SOPs for each department at District levels. g. Prepare, maintain and upgrade the mechanism for early warning and device 	<ul style="list-style-type: none"> a. Activate DEOC. b. Inform/ make District level departments ready for Emergency Response. c. Periodically inform PEOC and NEOC about the latest situation. d. Conduct rapid and multi-sectoral assessments of disaster affected areas and determine the extent of loss and damage. e. Incident management at district level. f. Organize evacuation on priority basis. g. Prepare detail Plans for the resources requirement for relief operations and share it with the PDMA and NDMA. h. Provide food, drinking water, medical supplies, non-food items to the affected population. i. Deploy Medical, Search & Rescue and emergency response team immediately. j. Set up relief Camps.

<p>information dissemination strategy that information reach to the end user.</p> <p>h. Identify and prepare list of Public Buildings which can be used as Relief Centers in the event of disaster and prepare Plans for various supplies (Water & Sanitation etc) for these buildings.</p> <p>i. Stockpile relief and rescue materials or ensure preparedness to make such material available at short notice.</p> <p>j. Monitor hazards, risks and vulnerable conditions within the district on regular basis and device plan accordingly.</p> <p>k. Encourage participation of NGOs and voluntary social welfare organizations and communities in different aspects of emergency response.</p> <p>l. Enforce vacation of encroached areas (in hazard prone areas) by vulnerable population.</p> <p>m. Clearing of River Plains, Nullahs/ Natural drainage system before Monsoon Season.</p> <p>n. Educate people about Building Codes and Land Use Planning.</p>	<p>k. Coordinate with PDMA and NDMA to deploy resources for emergency response.</p> <p>l. Coordinate and facilitate with I/NGOs, UN bodies and Philanthropist organizations for resource mobilizations for response.</p> <p>m. Develop complaint mechanism system and set up complaint mechanism cell in the DEOC and at sub District level.</p> <p>n. Organize regular Media and Public information briefings.</p> <p>o. Organize detailed assessment for the early recovery program and prepare proposal and submit to PDMA and NDMA.</p> <p>p. Prepare Situation Report on daily and weekly basis and circulate to the PDMA, NDMA and all stakeholders etc.</p>
Taluka & Town/Tehsil Administration	Union Councils
Below District, Taluka/ Tehsil and sub Taluka/ Tehsil level are the lowest administrative units in the District administrative structure. Taluka/ Tehsil	Union councils are the lowest tier in the government structure, with elected representatives from villages and ward levels. Traditionally UCs plays an important

administration has communication with local communities on regular basis. They play a vital role in disaster response during and after the event. Taluka/ Tehsil administration has the following role in emergency operations:-

- a. Prepare Contingency Plans covering potential hazards in the area.
- b. Organize and conduct damage/ loss assessment.
- c. Incident management at Tehsil/ Taluka level.
- d. Organize and conduct rapid assessment for relief needs and response.
- e. Assist in post-disaster assessment for early recovery and post-disaster rehabilitation.
- f. Assist and organize relief operation in affected area of the Tehsil/ Taluka.
- g. Identify and prepare a list of Public Buildings which can be used as Relief Centers in the event of disaster and prepare Plans for various Supplies (Water and Sanitation etc) for these buildings.
- h. Organize and manage Relief Camps in the affected area.
- i. Organize water and sanitation facilities with help of PHED department for relief camps.
- j. Identify and prepare list of vulnerable groups for relief response.

role in relief distribution at village level in the affected area. The following are the main function of the UC in disaster response:-

- a. Assist assessment team in damage and loss assessment.
- b. Prepare a list of beneficiaries in affected area.
- c. Provide storage facility and security for relief goods at village level.
- d. Assist government in distribution of relief.
- e. Assist government in verification of beneficiaries.
- f. Prepare a record of relief distribution.
- g. Identify and prepare a list of Public Buildings which can be used as Relief Centers in the event of disaster and prepare Plans for various Supplies (Water and Sanitation etc) for these buildings.



- k. Distribute relief goods through District Government to the affected communities and priorities given to poorest, child headed household, women headed household, disabled and elderly in the community.
- l. Coordinate and facilitate government departments, UN, I/NGOs and Philanthropists for relief activities.
- m. Facilitate and support District government and local government/ elected representatives in relief.
- n. Coordinate with district administration and update them on relief activities.
- o. Prepare final report on relief operation and send it to DDMA.
- p. Monitor relief operation regularly and report to DDMA.

3.7 Disaster Response Functions.

Bottom up approach is followed in disaster response. Category 1 & 2 disaster are handled/ managed by DDMA's & PDMA's respectively and Category 3 & 4 disasters are handled/ managed by NDMA. DMAs handle/ manage disasters from their respective EOCs. At National level, National Emergency Operations Centre (NEOC), at Provincial/ Region level Provincial Emergency Operations Centres (PEOC) and at District level, District Emergency Operations Centres (DEOC) function for disaster management.



Figure 3.2 Various Levels of Contingency Planning

3.7.1 Emergency Operation Centre (EOC). The EOC serves as the hub for receiving Early Warning and issuing information to the Public, Media, Ministries, departments and humanitarian response agencies. The EOCs will also lead/ ensure the coordination and management of relief operation in affected areas. All the agencies such as Fire & Rescue Services, Armed Forces, Civil Defence, Pakistan Police Services, Ambulance Services, Red Crescent Societies, Edhi Foundation and other humanitarian agencies will be coordinated by the EOCs at respective level. The EOCs will function throughout the year in disaster and non-disaster times. In disaster times, the EOCs will coordinate relief and early recovery and non-disaster time emergency centre will be working in emergency preparedness mode e.g. Contingency Planning.

3.7.2 Objectives and functions of Emergency Operation Centres(EOCs)

a. Objectives

- (1) Collect, collate/ analyse and disseminate information.
- (2) Disseminate timely warnings.
- (3) Coordinate and issue instructions to all stakeholders for effective response.
- (4) Communicate/ Coordinate with different stakeholders for effective response.
- (5) Organize and manage emergency operations.
- (6) Mobilize and deployment of resources.

b. Main Functions

- (1) Collect, consolidate, analyze and circulate information related to emergency operations to the key stakeholders.
- (2) Issue warnings/ alerts to all concerned.
- (3) Mobilize and deploy resources for initial response.
- (4) Coordinate/ monitor initial assessment for further response.
- (5) Coordinate provision of relief items (Food/ Non Food Items (NFIs))
- (6) Coordinate with humanitarian organizations (national/ international), for resource mobilization and deployment in the affected areas.
- (7) Coordinate relief and logistic operations.
- (8) Preparation of daily situation report and dissemination to all concerned.
- (9) Prepare media briefs for wider circulation and organize regular media briefings.
- (10) Coordinate/monitor recovery need assessments.
- (11) Coordinate and monitor early recovery initiative undertaken.

3.7.3 Activation and Stand Down Procedures. The activation and stand down procedures for NEOC is covered in ensuing paras; however, activation and stand down procedures for PEOCs & DEOCs would be determined and included by respective authorities in their Response Plans, once formulated based on the NDRP-2019.

a. National Emergency Operation Centre (NEOC)

- (1) **On Receipt of Alert (Standby - Stage 1).** Director Response will collect information from PEOC/ DEOC about the potential disaster, after analysis of situation, advise/ recommend Chief Coordinator NEOC for Alert or Standby Position of NEOC. Chief Coordinator will update the Chairman NDMA and to seek his approval for activation of NEOC. SOPs to be followed for this stage are:-
 - (a) Monitor the situation.
 - (b) Alert the NEOC staff for operationalization of NEOC at short notice.
 - (c) Put everything ready and functional in the NEOC.



- (d) Coordinate with key ministries, departments, JS HQ, Armed Forces, NLC, humanitarian organizations and alert them.
 - (e) Closely coordinate DG NDMA, PEOC to get information and review it.
- (2) **On Receipt of Warning (Stage 2).** Chairman NDMA will issue notification for full activation of the NEOC. Chief Coordinator will inform key Ministries, Federal Flood Commission (only in case of floods), PDMCs/ PDMAAs, JS HQ (for information of Tri Services), Emergency Services, Civil Defense, NGOs/ INGOs, , UN Agencies, PRCS, and Media. NEOC will remain fully operational on 24/7 basis. SOPs to be followed for this stage are:-
- (a) Place NEOC on fully activation/ operational role.
 - (b) Open all communication systems and links.
 - (c) Collect essential information including situation updates, details of resources etc which will be required for relief operation.
 - (d) Inform all relevant Ministries and Departments and ask them to send their representative/ liaison officers to operate from the NEOC.
 - (e) Chief Coordinator/ Chairman NDMA may meet the NDMC to update on the situation.
 - (f) Share information regularly with PEOCs.
- (3) **Stand Down Procedure (Stage 3).** After reviewing situation and consultation with concerned DG PDMAAs, Chief Coordinator NEOC will recommend the Chairman NDMA for Stand Down. After getting approval of Chairman NDMA, Chief Coordinator NEOC will issue/ share notification of Stand Down to the key Ministries and Departments at Federal/ Provincial and to the PDMAAs. SOPs to be followed for this stage are:-
- (a) Director NEOC will debrief Chief Coordinator about stand down who will advise Chairman NDMA for approval of stand down.

- (b) Director NEOC will disseminate notification to the relevant ministries, departments and other stakeholders.
- (c) Final report on the emergency operations will be circulated to key stakeholders.
- (d) Inform PEOC & DEOC for stand down and share final report with them.
- (e) NEOC staff will work in normal mode.

National Emergency Operations Centre (NEOC)	Provincial Emergency Operations Centre (PEOC)	District Emergency Operations Centre (DEOC)
<p>a. The NEOC serves as nerve centre and hub of activities of NDMA (<i>analysing Early Warnings, issuing Alerts/ Advisories etc to Response Agencies</i>) during disasters/ emergencies.</p> <p>b. NEOC will accommodate reps/ liaison officers from different Ministries, Departments, Media and humanitarian organizations joining NEOC.</p> <p>c. The NEOC will coordinate Disaster Response (<i>Relief, Rescue, Recovery etc</i>) by all Government / NGOs Organisations at National level (<i>Armed Forces, NGOs/ INGOs, UN Agencies, PRCS, and other</i></p>	<p>a. The PEOC will serve as the hub actives for receiving Early Warning and issuing alerts/ advisories to Response Agencies, Public and Media etc.</p> <p>b. The PEOC will coordinate of Disaster Response operations at Provincial & District level.</p> <p>c. The PEOCs are headed by the Chief Coordinator PEOC (Director Ops/ Response) and supported by Staff from Operations, Communication, Public Information and Administration & logistics. Overall functioning of PEOC is supervised and directed by the DG PDMA.</p>	<p>a. DEOC will serve as the hub of activities and act as headquarters ensuring implementation of Disaster Response at District level.</p> <p>b. DEOC will receives Early Warning/ Alerts/ Advisories, disseminates to Public down at village level and ensures counter actions (measures to evacuate people).</p> <p>c. The DEOC will coordinate management of relief operations in affected areas.</p> <p>d. The DEOC will function throughout the year in Disaster as well as non-disaster times.</p>



- humanitarian organizations).
- d. Preparation of daily Situation Reports/ updates (SITREPs) and dissemination to all stakeholders.
- e. Prepare media briefs for wider circulation and organize regular Media Briefings for awareness of general Public.
- f. The NEOC is headed by the Director Response and supported by Staff from Operations, Communication, Public Information, Finance and Administration & Logistics. However, overall activities of NEOC are supervised/ directed by the Chief Coordinator (Member Ops).
- g. The NEOC works round the clock during the disaster time and in normal office hours during non-disaster time.
- d. The PEOC will function throughout the year in disaster and non-disaster times.
- e. In disaster times the PEOC will disseminate Early Warnings, Alerts/ Advisories, Relief coordination & management and focus on Early Recovery.
- f. In non-disaster time the focus will be on Preparedness and Contingency Planning.
- e. In disaster times the DEOC will disseminate Early Warning, issue Alerts/ Advisories and carry out relief coordination.
- f. In non-disaster times, the emphasis will be on emergency Preparedness and Contingency Planning in the district.
- g. The DEOC is located in DC Office, in the District Headquarters and is overall supervised by the DC of the District.





SECTION-4

DISASTER RESPONSE



Disaster Response

Disaster Response can be termed as the provision of emergency services and public assistance immediately after a disaster in order to save lives, reduce health impacts, Public safety and meet the basic substance needs of the people affected by the disaster. Timely and well coordinated interventions by all stakeholders is the essence of good/ effective response which not only **limits casualties/ saves lives, alleviate sufferings, restore essential life support & community facilities, mitigate further damages** rather **provide foundations for subsequent Recovery** of the People/ infrastrue to normalcy through linking Relief with Recovery and subsequently to Rehabilitation.

4.1 Evacuation, Search, Rescue and First Aid

4.1.1 Evacuation. It is the immediate relocation/ shifting of vulnerable people away from the hazard prone / disaster affected area to safer locations (identified camps sites etc). Evacuation can be of small scale evacuation i.e removal of people from dangerous/ damaged/ collapsed buildings; and large scale evacuation i.e. move of communities (population of villages etc) of a District etc. Evacuations may be carried out before, during or after disasters for which evacuation plans are developed to ensure the safest/ efficient evacuation. **Evacuation of people to safer place is the responsibility of District Administration.** Some important steps involved in emergency evacuation are as following:-

- a. **Evacuation Plan.** Plans must be prepared beforehand, some of the salient features of the Plan are:-
 - (1) Identify safe places and routes in respective areas.
 - (2) Fourmulate Transport Plan for evacuation.
 - (3) Assigne roles & responsibilities to government departments/ officials or designated staff.
 - (4) Integarated Evacuation Teams from Government officials (from different departments), Armed Forces and volunteers.
 - (5) Recognition of potential threat.
 - (6) Develop communication mechanisms for information sharing with communities and volunteers.

- (7) Train and equip Evacuation Team for emergency evacuation of disabled persons.

b. Execution. Following will ensure effectiveness of the Evacuation Plans:-

- (1) Prior arrangements for shelters at earmarked evacuees' lodgment sites.
- (2) Provision of basic facilities (Water & Sanitation etc) in camps.
- (3) Adequate arrangements for transportation of the affected communities and their minimum belongings, including livestock.
- (4) Priority of evacuation be allocated to Elderly, Pregnant Women and Disabled persons.
- (5) Fool proof security arrangements for during evacuation and in the Camps.
- (6) Separate camps for the Cattle.

In situations like floods, cyclones and conflicts; government makes decisions for mandatory evacuation and then the responsible government officials at District and below District level shall try to convince local communities for voluntary evacuation. At times, government may have to use pressure or force (Police, Rangers, FC or Army) to evacuate local communities to protect them from the potential disaster. In emergency evacuation, whether it is voluntary or forced, communities should be allowed to take along minimum essential items/ belongings/ cattle.

4.1.2 Search and Rescue. The first 12 hours of any disaster are regarded as the critical hours. Timely deployment of Search & Rescue asset/ teams can save precious lives. Search & Rescue may have to be carried out in plains, mountain, water (flood water/ lakes/ dams etc) and collapse structures & buildings in fire etc, therefore, Search & Rescue Teams must be trained and equipped (mediums helicopters, boats, hovercrafts) accordingly. For the purpose of Urban Search and Rescue, NDMA has raised and located/ deployed heavy and medium Search and Rescue teams as described earlier.

4.1.3 Rescue & Transportation of Injured and Dead. Triage/ Tagging procedure is followed for injured and dead. It is the process of prioritising transfer of the injured for evacuation of people based on first hand assessment by the the medical officer/ paramedics on site. Evacuation priority is depicted/ expressed by identification of the patients by attaching **Red**

Tag to the **top priority** patients, **Yellow Tags** to the **second priority** patients, **Green Tag** to the **third priority** patients and **Black Tag** to the **least priority (dead)** persons.

4.1.4 First Aid/ Medical. Access to healthcare is a critical determinant for survival in the initial stages of disaster. Disasters almost always have significant impacts on the public health and well-being of affected populations. Provision of medical assistance can be a simultaneous action during Search & Rescue and all subsequent phases.

4.2 Rapid Need Assessment. Rapid Need Assessment is carried out by the Government alone or in conjunction with UN System, immediately following a sudden-onset of a disaster. The aim of the assessment is to acquire basic information on the needs of affected populations and to support the identification of strategic humanitarian priorities. It thus enables the Government and other stakeholders, a common understanding of the situation and its likely needs for immediate interventions. To identify the relief needs, NDMA in coordination with OCHA has finalized MIRA methodology to be followed by all for Rapid Need Assessment. Main features of the methodology are as following:-

4.2.1 Purpose. To help decision-makers on the nature and dynamics of the crisis and to further define strategic humanitarian priorities.

4.2.2 Timeline

- a. Within 72 hours, a situation overview based primarily on secondary data (remote sensing) and other sources.
- b. Within 7 days, carry-out a field assessment on community level to identify needs and priorities of the affected/ vulnerable population.

4.2.3 Process. The MIRA process and report encompasses following three main steps:-

- a. Review and analysis of secondary data which is the basis for the situation overview.
- b. Community-level field assessment and Primary data collection based on key informant interviews and structured observations.
- c. Final inter-sectoral analysis and release of final MIRA report.

4.3 Relief. It is the provision of Services and Public assistance during or immediately after a disaster to save lives, alleviate sufferings of the people, reduce health impact and

meet basic subsistence needs of the affected people. During the relief phase, focus must be on provision of food, shelter, health assistance and WASH (water, sanitation & hygiene). Efforts be made to conclude Relief Operation within three months, after which recovery must begin. However, in certain/ exceptional cases it may surpass if situation so warrants. Government agencies are the major relief provider; however Philanthropists, Civil Society Organizations, Pakistani community abroad, UN system in the country, regional/ friendly countries and donors may also take part in the relief depending upon the magnitude of the disaster. Some of the important features of effective relief are:-

- a. Elaborate relief mechanism.
- b. Non-discrimination and taking care of vulnerable groups.
- c. Efficient Logistic system for timely flow (receipt & distribution) of relief goods.
- d. Liberty of action and facilitation for relief workers / humanitarian community.
- e. Coordinated operation.
- f. Efficient/ transparent cash grant system.
- g. Information management.
- h. Media handling.

4.3.1 Basic Ethics to be followed by the Government Officials

- a. In the event of a disaster, affectees go through a difficult times and they are more demanding than they would be in normal circumstance. Government officials also have a lot to deal with in that situation; however they are obligated to adopt a caring attitude towards the survivors in terms of being responsive to their needs.
- b. Following the ethical priorities during disaster is often difficult for people in need and government officials alike. This difficulty is amplified when government officials are likely to face pressure from a host of **Political, Religious/ Sectarian, Ethnic**, and **Kith & Kin** quarters. Nonetheless, they must be ethically strong enough to withstand the pressures to ensure the well-being of the affected population.

4.4 Early Recovery.

The restoration and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors is termed as Recovery. The main purpose is returning Population, Critical Infrastructure and essential Government or Commercial Services back to a functional, if not pre-disaster state. The action often characterized by temporary actions

that provide a bridge to permanent measures. Recover activities may begin when the emergency has ended. In some cases, recovery activities can be undertaken alongside the relief activities. During recovery, the intervention must be focused shelter, agriculture, food security, health & nutrition, education, WASH (Water, Sanitation & Hygiene), governance, livelihood and community infrastructure. Thematic areas of DRR, gender, environment and protection should be mainstreamed in all the sectors during recovery interventions.

4.4.1 Determining the Recovery Needs through RNA. In order to determine the recovery need, RNA is conducted. A comprehensive methodology for RNA has been formulated by NDMA in collaboration with UNDP. The assessment is based on the Primary data collected by the Government authorities, verification by the joint team and analysis. Based on the assessment, the recovery needs are worked out for all Sectors.

4.5 Rehabilitation and Reconstruction. Post-disaster reconstruction is a complex process. It requires multi-sectoral involvement, very significant resources and a wide range of skills. Primarily Reconstruction is the responsibility of the government; however humanitarian agency, donors and regional/ friendly countries can be engaged in reconstruction either by providing financial resources or undertaking the projects as per the government's priorities. Damage and reconstruction needs are determine by conducting Damage and Need Assessment.

4.5.1 Damage Needs Assessment. DNA is initiated with the objective of estimating the extent of the damage and the required needs for rehabilitation and reconstruction of the damaged assets and infrastructure; and restoration of livelihoods and economic productivity. Globally the ADB and the World Bank leads the assessment process in close coordination with Government. In our context EAD initiates the request to conduct DNA, whereas all coordination is done by NDMA/ PDMA.

4.5.2 Methodology for undertaking DNA. For the estimation of the effects/ impact of the disaster, the methodological tools developed by UN are used. The impact of the disaster on each sector of the economy is estimated with the following three costs:-

- a. Direct damage referring to the monetary value of the completely or partially destroyed assets, such as social, physical and economic infrastructure immediately after the disaster.

- b. Indirect losses referring to income losses, comprising of both the change of flow of goods and services and other economic flows such as increased expenses, curtailed production and diminished revenue, which arise from the direct damage to production capacity and social and economic infrastructure.
- c. Reconstruction costs measuring the cost of rebuilding lost assets and restoring lost services, assessed as the replacement cost with a premium added for building back smarter.

Data from district/ tehsil level is collected by the government and verified/ validated by the DNA Sector teams. The data received by the DNA Sector teams is validated through a number of measures including: field damage inspection visits by sector teams; interviews with stakeholders; desk review; satellite imagery and GIS data comparisons; and other plausibility checks. Based on the above, analytical work is undertaken by sector teams for a comparative pre and post disaster assessment of the infrastructure and services affected.

4.6 Gender and Vulnerability Considerations.

It has been established that the effects of disaster are more pronounced on the vulnerable groups of society such as women, children, elderly person and persons with disabilities. Within these categories there may be even more vulnerable groups, such as females heading their households, children with disabilities or persons with mental health issues. Because of their vulnerabilities, at times these groups have limited access to relief commodities. It is therefore imperative for the responders to safeguard the rights of vulnerable people in disaster. They must be accorded priority in rescue operation and all other activities of response. It is also essential to cater to the unique needs of these groups while planning for and executing the response.

4.7 Availability of Relief Supplies and Commodities.

The readily availability of Relief Supplies/ Commodities is one of the important factors for effective response. After disaster impact, usually, there is an urgent need of provision/ distribution of food, shelter, medical supplies and other required assistance among affected population. Emergency response actions, therefore needs to cover two main areas: namely **procurement of various commodities** from Stores (already stockpiled), commercial supplies or/ and international assistance sources **and the distribution of these commodities among affectees** in the best possible orders of priority. International assistance resources often play a considerable part in Response operations. These resources mainly comprise relief commodities, especially

shelter and medical supplies. However, international assistance is mostly received when the government launches an international appeal for assistance.

For Federal, Provincial and District resource stockpiling, NDMA in collaboration with WFP has constructed eight strategically and geographically located HRF across the Country to enhance the country's emergency response capacity. An HRF covers 9.1 acres and has four climate-controlled warehouses to store temperature sensitive items such as ready-to-use food and medicines. The total covered storage capacity of the facility is 3000 metric tons and an open space of up to 10,000 metric tons. Four pre-fabricated offices and a reinforced paved area to facilitate loading/ unloading and parking of heavy vehicles. Other than HRF, 51 Flosspans have also been constructed in the Districts to be used by DDMA/U for storage of relief commodities.

4.8 Media.

Media can play vital role in disaster response/ management. Therefore, a well-organized arrangements be made at all tiers for information sharing/ periodic media briefs by appropriate Spokespersons. Efforts must be made to provide timely updated and accurate information to media houses for dissemination. Delays in provision of information may lead to frustration and misreporting by media house which should be discouraged at all levels.

4.9 Monitoring and Evaluation.

During the execution of response, to track the progress and facilitate the mid-course correction, effective/ efficient monitoring is mandatory. Mechanism for monitoring of response activities must be devised by DMAs at all tiers. Frequent interaction with Non-Government actors can be an effective measure to monitor their activities. Post disaster evaluation is vital to determine the relevance and fulfillment of objectives. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learnt. The best practices adopted during the execution of response must be recorded, analyzed and shared with all concerned and implemented in future courses of actions.





ANNEXES



DETAIL/ LIST OF DOCUMENTS USED FOR PREPARATION (REVISION) OF NDRP

Sr.#	Document	Description/ Purpose of Document
Acts		
1.	NDMA Act-2010	<p>National Disaster Management Act 2010 was passed by Parliament of Pakistan in 2010, it received the assent of the President on 8 December 2010. The Act applies to entire Pakistan. The Act was passed in backdrop of 2010 Floods in Pakistan to strengthen Disaster Management system. The Act created a National Disaster Management Commission which is responsible for laying down the Policies, Plans and Guidelines for Disaster Management in Pakistan.</p> <p>Source: http://www.ndma.gov.pk/files/NDMA-Act.pdf</p>
Policies		
2.	National DRR Policy-2013	<p>This Policy covers Disasters Risk Reduction (DRR) in a more holistic way and introduces a proactive/ anticipatory approach by laying special emphasis on Risk Assessment, Prevention, Mitigation and Preparedness. The success of the National DRR Policy lies in the effective implementation of Operational Plans to be prepared and implemented by National and Provincial Governments in line with broad policy parameters.</p> <p>Source : http://www.ndma.gov.pk/Documents/drrpolicy2013.pdf</p>
3.	National Climate Change Policy – Ministry of Climate Change 2012	<p>The National Climate Change Policy comprehensively addresses all possible challenges of Climate Change adaptation and mitigation in foreseeable future; and sure to provide rock solid foundational framework for ensuing Climate Change Action Plans, Programs and Projects. The vulnerabilities of various Sectors to Climate Change have been highlighted and appropriate adaptation measures spelled out. This also cover Policy measures to address issues in various Sectors such as Water, Agriculture, Forestry, Coastal Areas, Biodiversity and other vulnerable Ecosystems.</p>

		Source: http://www.gcisc.org.pk/National_Climate_Change_Policy_2012.pdf
Guidelines		
4.	Host Nation Support Guidelines	<p>The Host Nation Support Guidelines for Pakistan focuses on actions to reduce the response time through a set of clearly defined Guidelines for decision-makers in Government, assisting Countries and International Humanitarian Organizations. The Guidelines are designed to identify the mandates, roles and responsibilities, processes, clearance requirements, and coordination procedures to provide a common operating picture for all stakeholders.</p> <p>Source: http://www.ndma.gov.pk/plans/Host%20Nation%20Support%20Guidelines%20(Final).pdf</p>
5.	National Policy Guidelines on Vulnerable Groups in Disasters - NDMA Gender & Child Cell (2014)	<p>The Guidelines cover all the major areas that require attention in disaster management from Data Collection and Policy Planning to Awareness raising of communities and sensitization of the officials involved in Rescue, Relief and Rehabilitation. This document will be a helpful source for all those working in the disaster management system - planners and managers as well as ground level responders and relief staff.</p> <p>Source: http://www.ndma.gov.pk/plans/gcc_policy.pdf</p>
6.	NDMA Guidelines on Stocking, Maintenance and Supply of Relief and Rescue Items	<p>Objective of these guidelines is to streamline the Stocking System and provide a uniform matrix for stocking of different items by all relevant authorities for any Relief and Rescue situation.</p> <p>Source: www.ndma.gov.pk/publications/NDMA-guidelines.pdf</p>
7.	Guidelines Ex-Gratia Assistance to the Persons Affected by Natural and Man Made Disasters	<p>The objective of these guidelines is to ensure uniformity as well as streamlining the system of Payment of ex-gratia Financial assistance to the persons affected by disaster/ calamity in a smooth effective and transparent manner. Moreover, to clearly define the roles and responsibilities of key Federal, Provincial and Regional departments for providing minimum cash ex-gratia assistance to the persons affected by disasters.</p>

		Source: http://www.ndma.gov.pk/Publications/
8.	NDMA Policy Guidelines for Conduct of Multi Hazard Vulnerability & Risk Assessment (MHVRA)	<p>NDMA has developed National Guidelines for executing Multi-Hazard Vulnerability and Risk Assessment (MHVRA), covering areas such as; detail step by step execution, methodology, governing Policies and SOPs, monitoring & evaluation process and standardization of data structure for all implementation partners to follow. Main purpose of these guidelines is to set standard benchmarks for all set of procedures to be followed, outlining datasets and tools for carrying out MHVRA exercise in the country to ensure unanimity for development of one National Picture for sustainable DRR Planning.</p> <p>Source: http://www.ndma.gov.pk/publications/MHVRA%202017.pdf</p>
9.	Guidelines for Multi Sector Initial Rapid Needs Assessment (MIRA)	<p>The Guidelines for MIRA have been developed by NDMA with technical support of UNOCHA to provide operational guiding principles on roll-out and implementation of MIRA. Approach adopted for these Guidelines is inclusive, comprehensive, decentralized and focused on institutionalization of initiatives. MIRA Methodology Document has been exclusively consulted for the development of these Guidelines. Source: http://www.ndma.gov.pk/publications/MIRA%20GUIDELINES.pdf</p>

[illegible]





National Disaster Response Plan
Prime Minister's Office
Government of Pakistan
www.ndma.gov.pk