

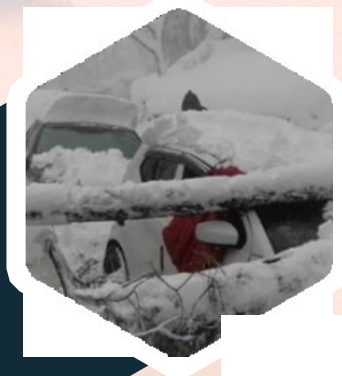


**Government of Pakistan
Prime Minister's Office**



**National Disaster Management Authority (HQ)
Main Murree Road Near ITP Office,
Islamabad**

NDMA Plan for Disaster Contingencies Winter - 2023/24



- 1. General.** Pakistan experiences a distinct winter season from November to February every year, marked by the onset of snowfall, predominantly in its northern regions. This season presents various hazards, including avalanches, landslides, cold waves, blizzards, and fog in different parts of the country. In recent years, climate change-induced extreme weather patterns have brought unprecedented challenges to Pakistan.
- 2.** National Disaster Management Authority (NDMA), as stipulated under clauses 9(a) and 9(b) of the NDM Act 2010 as per **Annexure A**, is entrusted with the comprehensive oversight of disaster management activities, guided by **PR3** framework; Preparedness, Response, Recovery, and Rehabilitation. While the NDM Act 2010 devolves the responsibility of disaster management to provinces and federating units, NDMA plays a pivotal role in issuing guidelines, early warnings, advisories to federal / provincial departments, as well as disaster management authorities and rescue services. This ensures the initiation of mitigation measures for potential disaster risks and the formulation of contingency plans for anticipated hazards.
- 3. “National Winter Contingency Plan - 2023-24”** has been prepared in coordination with all relevant stakeholders both at federal and provincial levels based on analysis of forecasted seasonal outlook issued by Pakistan Meteorological Department (PMD), input from NDMA Technical Team and likely impact of climate change. Guidelines have been outlined for all disaster management tiers and other relevant stakeholders for mitigation of likely hazards, preparations against most probable and worst-case scenarios for mounting timely response.
- 4. Overview of 2023.** During 2023, Pakistan encountered several natural disasters, which, while not causing extensive damage, demonstrated the country's resilience and preparedness in the face of hydro-meteorological challenges. These events included an avalanche in Upper Dir, the impact of Tropical Cyclone “BIPARJOY” that made landfall near the Pakistan-India Border in Sir Creek area of Sindh, wherein NDMA spearheaded coordination efforts between Federal and Provincial stakeholders for the prompt evacuation of at-risk areas in Districts Badin, Sujawal, Thatta and Tharparkar. Monsoon Season 2023 saw extremely heavy rainfall in the Upper Catchment Areas of River Sutlej and River Beas in India which subsequently caused major flooding along River Sutlej for the first time in over 30 years. NDMA coordinated proactive response to the threat by ensuring timely evacuation of vulnerable and at-risk areas along River Sutlej in Districts Kasur, Okara, Vehari, Bahawalnagar and Bahawalpur. While the scale of damage may have been limited, these incidents serve as valuable reminders of the importance of disaster preparedness and response in safeguarding lives and property.

5. In the face of these natural disasters, the National Disaster Management Authority took the lead in coordinating and responding to the crises. NDMA played a central role in these efforts, holding daily coordination conferences that brought together all relevant stakeholders, including government agencies, local authorities, and non-governmental organizations. This collaborative approach was instrumental in ensuring timely and effective evacuations during key events of 2023.

6. When Tropical Cyclone “BIPARJOY” threatened Pakistan's coastal regions, NDMA’s coordination efforts ensured that evacuation plans were promptly put into place, allowing residents in the cyclone's path to move to safer locations. The monsoon flooding along the Sutlej River necessitated swift action to safeguard vulnerable communities. Under the guidance of NDMA, timely evacuations were carried out, minimizing the risk to lives and property. NDMA's close coordination with regional authorities and its rapid decision-making demonstrated the authority's commitment to disaster risk reduction and response. This proactive approach underlined NDMA’s commitment to protecting communities from the potential impact of tropical cyclones, monsoon floods and other severe weather events.

7. As we reflect on the experiences of 2023, it becomes evident that proactive measures are essential to prepare for the upcoming winter season. Recognizing the importance of preparedness, National Disaster Management Authority has taken significant steps by issuing advisories, alerts, and guidelines to various government departments, authorities, ministries, and communities. The issuance of the “National Winter Contingency Plan 2023-24” is a critical step forward in this direction, providing a comprehensive framework for all stakeholders to align with the National Disaster Management Plan and the National Disaster Response Plan. This plan equips us to prepare for, mount, and execute effective, coordinated, efficient, and timely responses in the face of potential winter hazards.

Aim. To formulate “National Winter Contingency Plan - 2023-24” to aid in coordination of an effective response to the potential hazards associated with winter season.

8. **Scope.** The Plan shall encompass following: -

a. **Part I - General Aspects**

- (1) Hazard Profile.
- (2) Responsibility Matrix.
- (3) Organizational / Departmental Responsibilities.
- (4) Likely Response Challenges.

b. **Part II - Threat and Vulnerabilities**

- (1) PMD’s Winter Seasonal Outlook 2023-24.
- (2) Perceived Impact of Winter Seasonal Outlook 2023-24.
- (3) Major Conclusions from Winter Seasonal Outlook 2023-24.

- (4) Winter Season 2023-24 Contingencies.
- (5) Provincial / District Hazard and Vulnerability Maps.

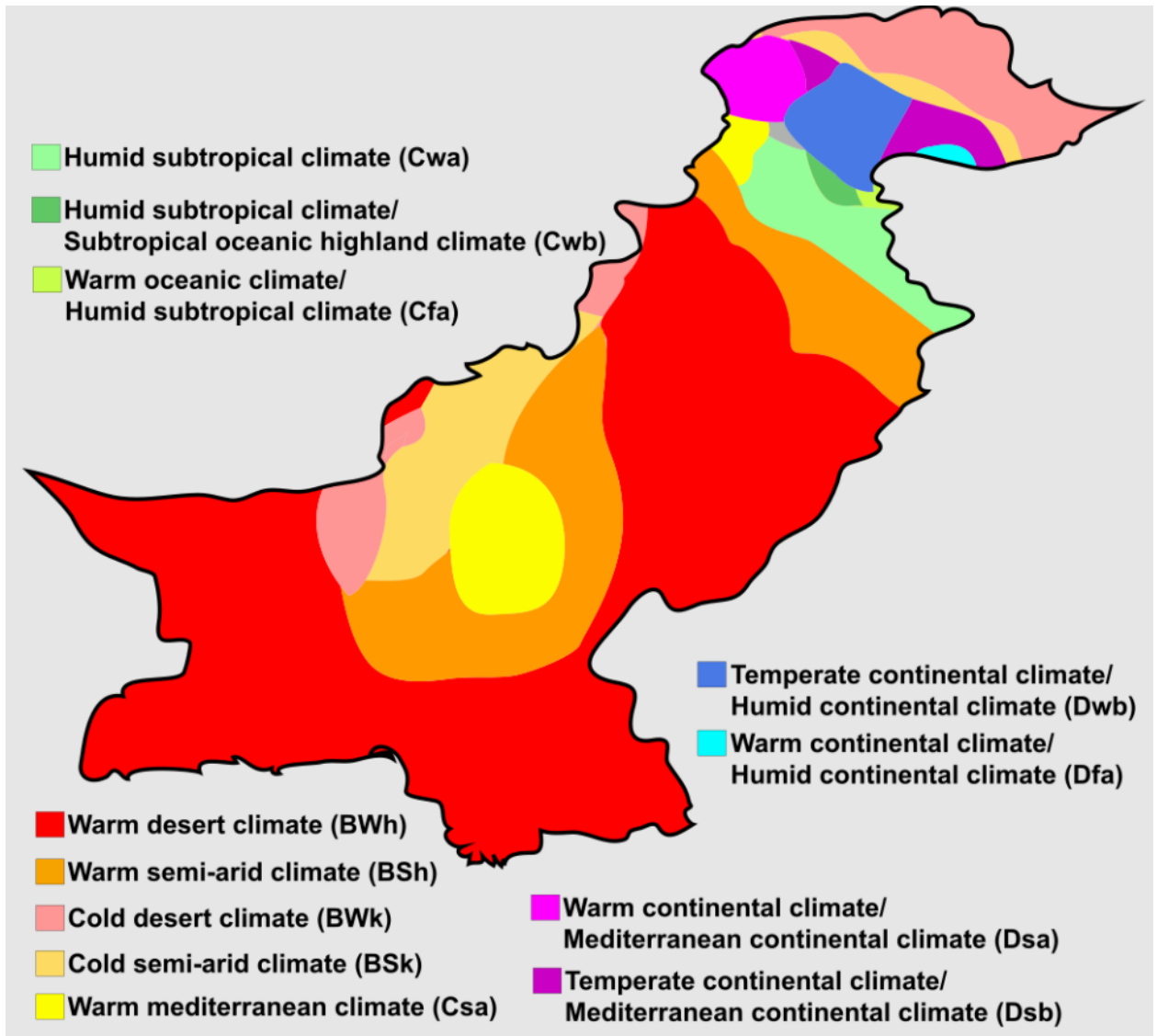
c. **Part III - National Response Guidelines**

- (1) Preparedness Phase.
- (2) Early Warning.
- (3) Response - Rescue, Relief & Early Recovery Phase
- (4) Coordination Aspects.

PART I - GENERAL ASPECTS

Hazard Profile

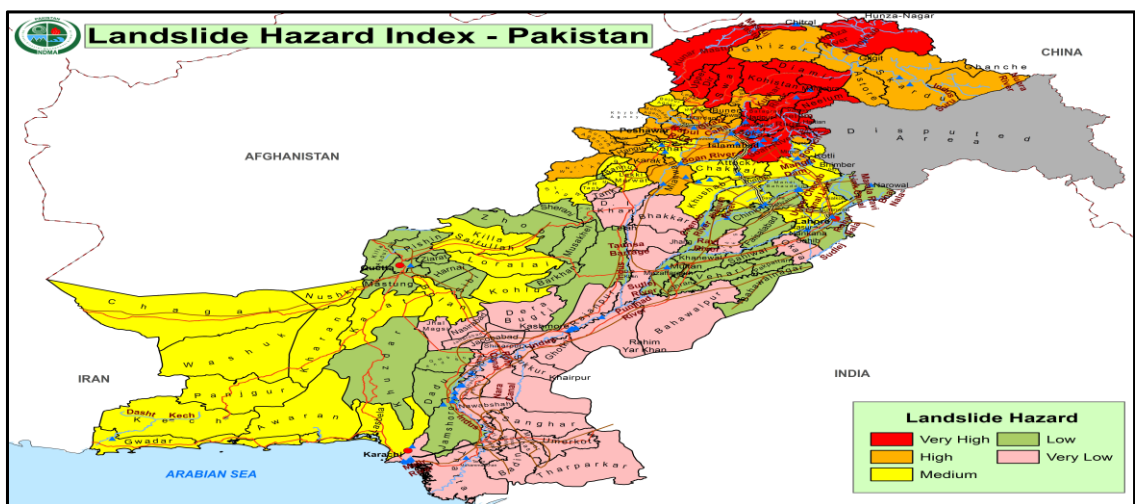
9. **Climatic Zones.** Pakistan is divided in five climatic zones (Map-I below) based on severity of winters by Pakistan Meteorological Department (PMD). Impacts of likely winter hazards in each zone varies because of different levels of precipitation during the season. These zones encompass all provinces of the country; Balochistan, Khyber Pakhtunkhwa, Punjab, Sindh, Gilgit Baltistan and the State of Azad Jammu & Kashmir.



Map-I Climate Zone

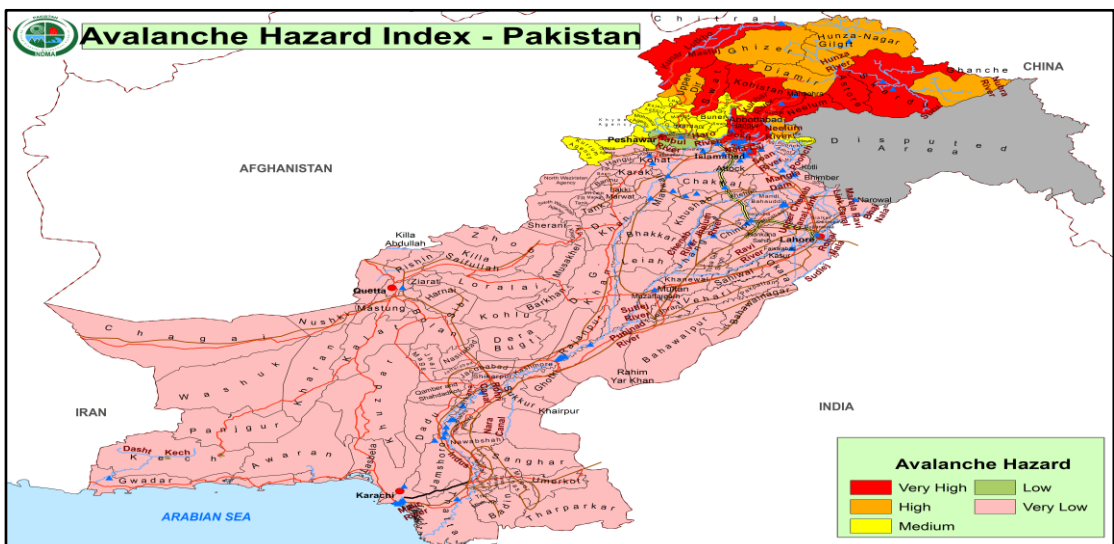
10. National Hazard & Risk Profile

- a. **Landslides.** Northern portion of Pakistan is at considerable risk of landslides. Sediment disasters (Map-II below); i.e., landslides are defined as the phenomena that causes 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 geological composition of mountain slopes and their inherent instability. Landslides mostly occur after heavy hydro-meteorological activity or seismic events which weaken the soil / ground. In particular, Balochistan, Khyber Pakhtunkhwa, Gilgit Baltistan and AJ&K are vulnerable to landslides because of their topography.



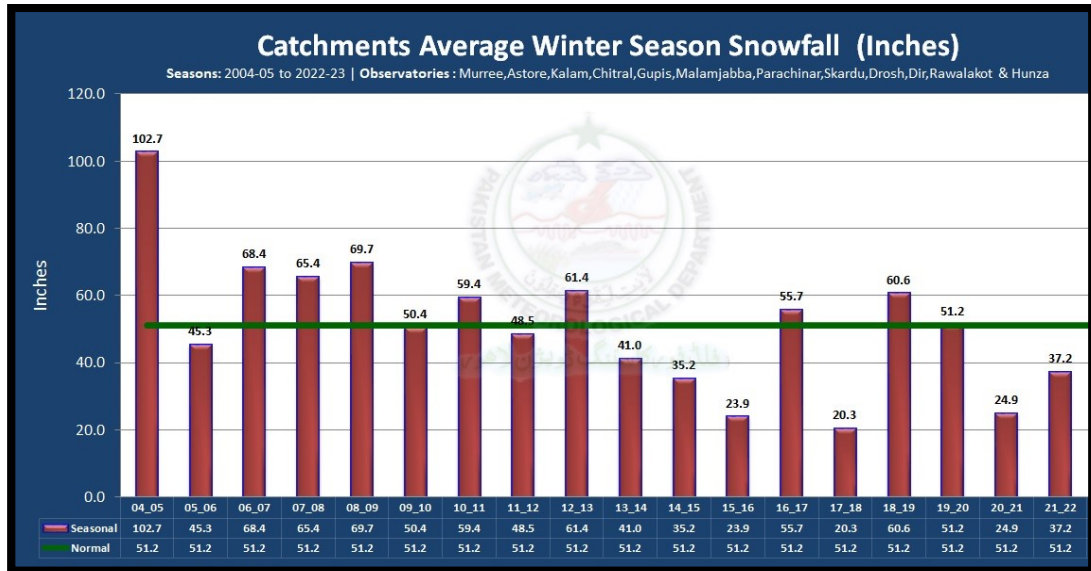
(Map-II District Wise Landslide Hazard Map)

- b. **Avalanche.** Khyber Pakhtunkhwa, Gilgit Baltistan and AJ&K are vulnerable to avalanches on a seasonal basis. Local communities surrounding avalanche prone areas are vulnerable to this disaster. Avalanches are a kind of local natural disaster, and their impact is limited to the communities living within the downward path of the avalanche.



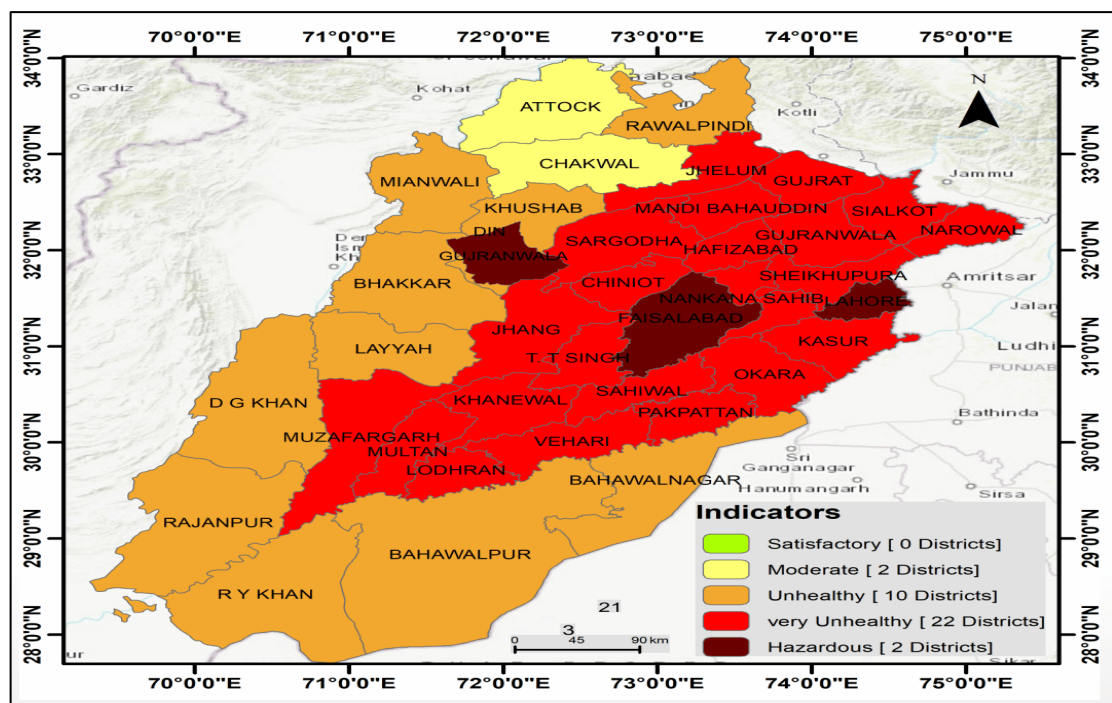
(Map-III District Wise Avalanche Hazard Map)

- c. **Heavy Snowstorms / Blizzards.** These are severe snowstorms characterized by strong-sustained winds and low visibility which last for a prolonged period of time, typically between 4-5 hours. Areas which can be affected / at-risk by this hazard include mountainous / hilly areas of Balochistan, Khyber Pakhtunkhwa, Gilgit Baltistan, Murree Region and AJ&K. **Graph-I below depicts data of last 20 years of average snow fall during winters.**



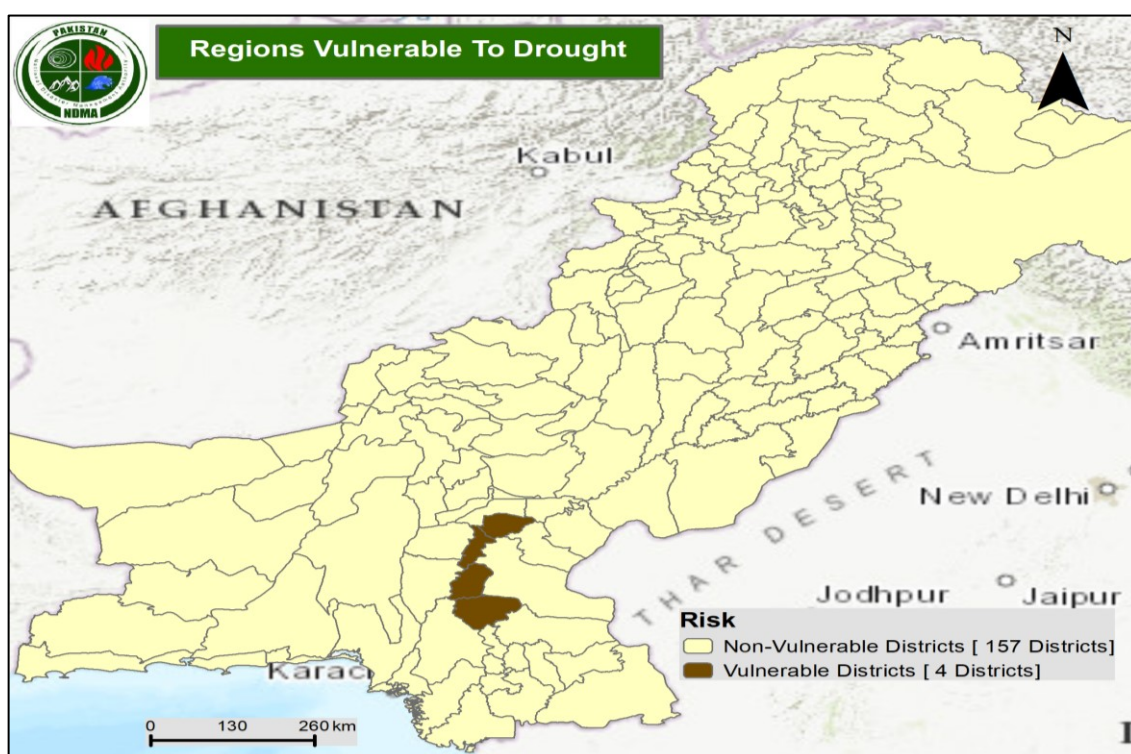
(Graph-I Catchments Average Winter Season Snowfall (Inches) - PMD)

- d. **Smog.** An intense type of air pollution, which occurs primarily in winter months in Punjab due to the intense agriculture activity of crop-stubble burning combined with urban pollution. This is further exacerbated by cross border activity of the same nature, moving smog from India into Pakistan.



(Map-IV District Wise SMOG Hazard Map)

- e. **Freezing Rain / Ice-storms.** A type of winter storm characterized by precipitation accompanied by cold temperatures causing freezing rain. These storms result in accumulation of ice on exposed surfaces such as roads etc. Heavier accumulation of ice on powerlines and trees can cause these to fall or be damaged. Areas which can be affected by this include mountainous / hilly areas of Balochistan, Khyber Pakhtunkhwa, Gilgit Baltistan, Murree Region and AJ&K.
- f. **Hailstorms.** Occur during thunderstorms when the temperature sufficiently drops causing rain drops to form into hailstones. These events can occur in any part of the country if appropriate hydro-meteorological conditions are met.
- g. **Fog.** Fog is a recurrent event which appears when water vapor condenses to make tiny water droplets which hang in the air causing a low-lying cloud formation or fog. Fog can significantly reduce visibility for all kinds of outdoor activities; including motor transport and aviation. Typically, low-lying and plains of Punjab, Khyber Pakhtunkhwa, Sindh, Islamabad and AJ&K are affected by this phenomenon.
- h. **Drought.** A weather phenomenon that is characterized by a prolonged and severe shortage of precipitation, leading to a significant deficit in available water resources, is known as a drought. Droughts can have a profound impact on various regions, including Pakistan, where they can result in serious water scarcity, agricultural challenges and adverse effects on both the environment and society.

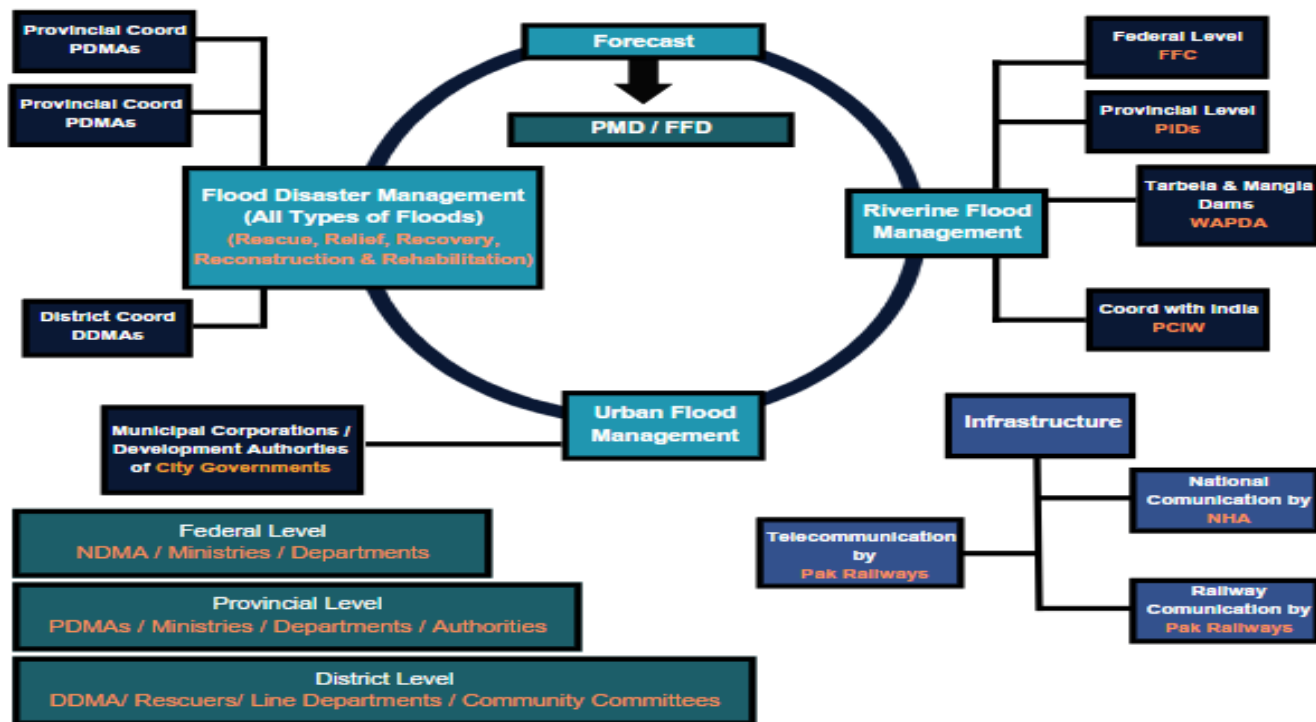


(Map-V District Wise Drought Hazard Map)

- i. **Cold-wave.** A weather phenomenon that is distinguished by the cooling of air leading to a rapid drop in temperature within a 24-hours period of time. Cold-waves can occur throughout Pakistan when the temperature drops 4.5 °C below the recorded average / normal temperature. This necessitates increased diligence to ensure protection of agriculture and livestock from the colder temperatures and an increased requirement for heating homes.

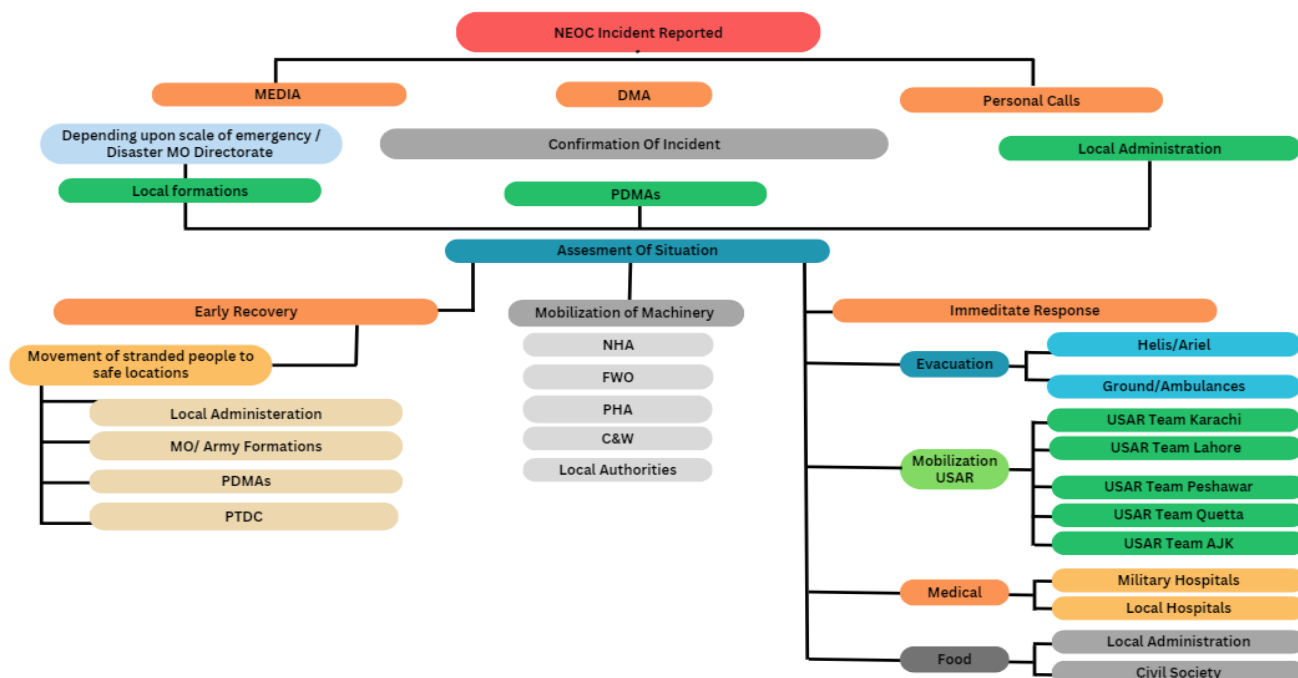
Responsibilities & Sequential Actions

11. **Responsibility Matrix.** Following graphical representation (Table-1) highlights the basic responsibilities of departments and is followed by sequence of actions by various stakeholders in line with their tasks and functions in case of emergency / disaster like situation. The actions under the contingency plan are set in motion as soon as an early warning / alert is issued by PMD / NDMA, based on developing weather system.



(Table - 1 - Responsibility Matrix)

12. **Sequence of Actions.** From occurrence/ reporting of an incident sequence of actions envisaged from concerned stakeholders is depicted below (Table-2).



(Table - 2 - Sequence of Actions)

13. To deal with likely challenges, responsibilities of national and provincial departments are as under: -

- a. **Weather Forecasts.** PMD will provide updated seasonal outlook in last week of November 2023 while they shall update the outlook on required basis. Updates on developing weather systems will be issued as early as possible to forewarn DM stakeholders and local communities.
- b. **Risk / Vulnerability Assessment.** Respective DDMA's / PDMA's to carry out risk and vulnerability assessment to identify areas requiring special attention and focus. Moreover, timely supply and storage of required amenities i.e., food, fuel, medicines etc to cater for any blockades / disruption of supplies.
- c. **Reconnaissance of Vulnerable / At-Risk Areas.** DDMA's / PDMA's / SDMA / GBDMA and ICT administrations to take lead in organizing and conducting reconnaissance of vulnerable / at-risk areas ensuring participation of all responders in respective areas to include Rescue 1122, paramedics, fire brigades, LEAs, Armed Forces, NHA, FWO and line departments concerned.
- d. **Conduct of Mock Exercises.** All DDMA's to plan and conduct mock exercises in respective areas to rehearse and synergize response measures among all stakeholders including selected communities / areas most vulnerable to winter hazards.
- e. **Repair / Strengthening of Roads / Bridges / Railway Tracks.** NHA, FWO, Pakistan Railway, C&W and line departments to complete their restoration efforts in time, especially in the areas likely to be affected during coming winter season 2023 / 24. PDMA's / GBDMA / SDMA and ICT Administration to ensure necessary coordination in this regard.
- f. **Maintenance & Restoration of Communication Arteries.** PDMA's to coordinate with respective DDMA's to identify critical communication arteries and ensure their timely maintenance through concerned departments and place machinery at the critical points, already identified, to manage restoration efforts in case of further need. Ministry of Communications to ensure implementation of works required and take requisite actions through concerned departments.
- g. **Coordination with Hotel & Transport Associations.** PTDC in collaboration with PDMA's / SDMA / GBDMA & ICT Administration, hotel & transport associations to hold coordination conferences at DDMA levels especially in areas likely to face influx of travellers / tourists during winter season. As an outcome of these conferences / coordination efforts, a set of guidelines / SOPs be issued to all stakeholders for

accommodating and transporting stranded people during an emergency / disaster situation.

- h. **Synergized Planning**. PDMA / SDMA / GBDMA and ICT administration are to ensure necessary coordination among all stakeholders. The plans must not cause duplication of efforts and have clear demarcation of responsibility among all stakeholders in consonance with their capabilities.
- i. **Mass Awareness**. Press Information Dept and Mol&B are responsible for maximum disbursement of weather advisories / alerts utilizing all possible platforms in all regional languages. These press / TV / social media releases be shared with NDMA / PDMA / SDMA / GBDMA and ICT administration for further propagation through respective platforms. PDMA and respective DDMA will ensure sharing advisories / alerts of NDMA / PMD with communities for timely sensitizing people in at-risk areas and with LEAs / traffic police for guidance of tourists / travellers.
- j. **Maintenance & Restoration of Utility Services**. All concerned departments for electricity, telephone / cell and natural gas will be responsible to devise respective contingency plans and ensure measures for immediate restoration of utility services as and when disrupted.

14. **Likely Response Challenges**. Aspects observed during year 2023 which need to be considered / addressed for efficient coordination and response are enumerated in ensuing paras.

- a. **Non-Adaptation of Standardized Situation Report (SITREP) Format** To compile accurate data, analyse, plan and assist quick decision making, NDMA issued a well deliberated and comprehensive SITREP format. However, the efforts did not yield desired results as stakeholders did not follow given format for reporting.
- b. **Stocking of Essential Items**. All PDMA / SDMA / GBDMA and ICT administration should take proactive measures in developing stocks of essential items in areas which are likely to be cut-off in case of landslides, avalanches and unprecedented precipitations / snowfall.
- c. **Lack of Planned Development**. Unplanned development, inadequate town planning, and non-conformity to risk assessments coupled with choked waterways and poor drainage is a perfect case for urban flooding in case of intense rains.
- d. **Lack of Resources**. Non-availability of adequate resources like de-watering pumps, and lack of training of operators also contributed towards worsening of situation.
- e. **Ad-hoc Functioning of District Disaster Management Authorities**. In most of the provinces, dedicated human resource has not been posted in DDMA. The gap at this

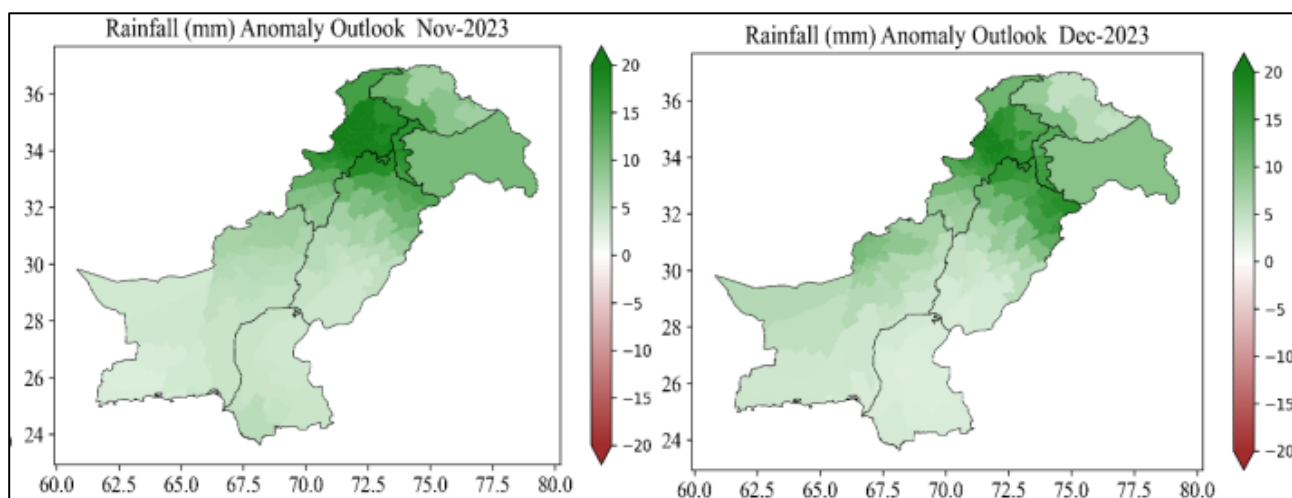
critical tier of “first response” causes an immediate pull on national resource especially the Armed Forces. This significant limitation leads to weakening of DDMA as a crucial tier of disaster response in the process.

- f. **Lack of Redundancy**. Non-availability of electricity backup system / generators for keeping operation rooms and rescue communication functional during emergency / disaster situation.
- g. **Prepositioning / Forward Placement of Resources**. Timely placement of resources and machinery like snow clearance and earth moving machinery at critical choke points and at-risk areas especially in the difficult terrain must be ensured. Non- availability of such equipment at a vulnerable location often leads to exaggerated emergency / disaster like situation.
- h. **Weak Awareness Campaigns**. All DM stakeholders are to take persistent measures to engage local communities and devise plans in coordination with them to ensure positive response in time of emergency / disaster. However, this aspect is missing in most areas and attempts to seek last minute cooperation adds to coordination efforts.
- i. **Involvement of LEAs / CAF in Planning**. Due to isolated planning by various departments, local administration finds it very difficult to implement the plans on ground. For efficient enforcement, all LEAs / CAF available in the vicinity must be involved in the planning process from the onset.
- j. **Availability of Heavy Earth Moving Machinery**. Non-availability of sufficient number of heavy earth moving machinery remains a hindrance in hilly / mountainous regions of the GB, KP, Balochistan & AJ&K. The challenge gets compounded during bad weather conditions involving long distance movements.
- k. **Social and Cultural Norms Inhibiting Disaster Response**. People in at-risk communities / from vulnerable areas generally resist evacuations till the very last moment and demand on-site relief instead at planned relief camps which increases quantum of rescue and relief efforts. Similarly, keeping tourists and locals away from vulnerable / hazardous locations remains a challenge for local administrations and law enforcement agencies.
- l. **Risk Assessment / Multi Hazard Vulnerability Risk Assessment (MHVRA)**. There is a dire need to undertake a detailed hazard and risk assessment of respective areas / regions to associate correct priorities and carry out effective planning for like hazards.

PART II - SEASONAL VULNERABILITIES

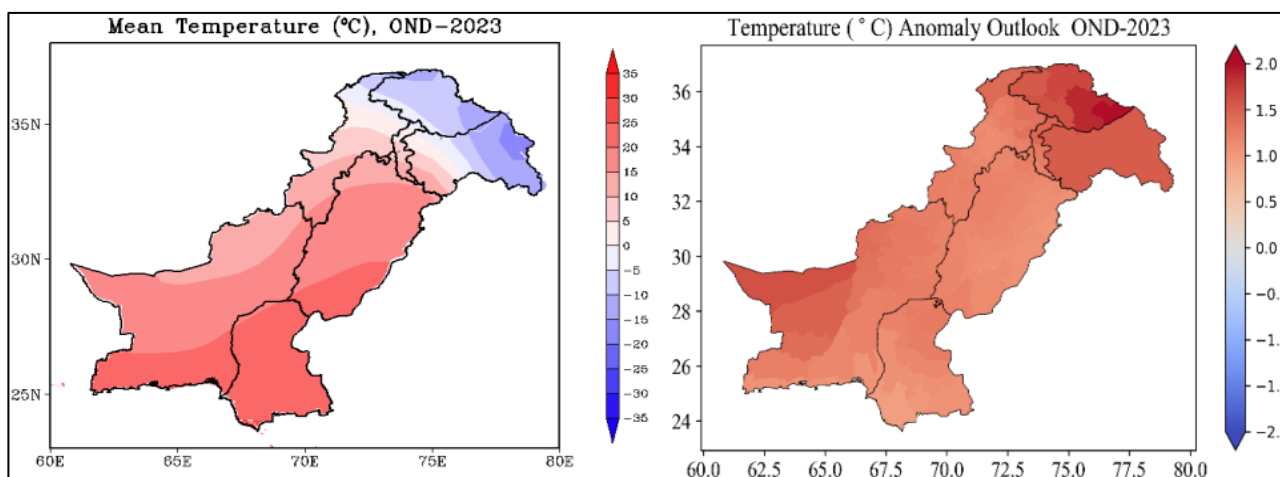
15. PMD's Seasonal Winters' Outlook 2023/24. The Seasonal Outlook for Winters in consensus with PMD and NDMA Technical Team (Graph-II below) covers the period of October to December 2023: -

A tendency of normal to slightly above normal precipitation is likely over most parts of the country during the next three months (OND) particularly over the northwestern parts.



(Graph-I Seasonal Outlook for Winters – PMD)

- a. Based on global and regional circulation patterns, the outlook can be explained as under:-
 - (1) During October 2023, nearly normal to slightly above normal rainfall (snowfall over the high mountain in upper Khyber Pakhtunkhwa and Balochistan) is likely over Khyber Pakhtunkhwa, Balochistan, Upper Punjab and AJ&K. While slightly below normal rainfall may be expected in Sindh and Gilgit Baltistan.
 - (2) In November 2023, nearly normal to normal precipitation is expected over most parts of the country particularly the upper parts including northern Punjab, Khyber Pakhtunkhwa and the adjoining areas of Kashmir.
 - (3) Nearly normal is likely over most of the country particularly over the central parts of Khyber Pakhtunkhwa and northern Punjab during December 2023.
 - (4) The likely temperatures pattern (Graph-III, below) is as under: -
 - (a) A tendency of normal to slightly above normal mean temperature is likely over most parts of the country during the period (OND) particularly the northeastern region including Gilgit Baltistan, Kashmir and western belt of Balochistan.



(Graph-II Likely Temperatures Pattern - PMD)

16. **Perceived Seasonal Impact – Winters 2023-24.** Predicted impact of climatic conditions are as under: -

- a. During October and November 2023, nearly normal to slightly above normal mean temperature is likely in most parts of the country particularly over western Balochistan and eastern Gilgit Baltistan.
- b. Nearly normal to slightly above normal mean temperatures are expected in most parts of the country during December 2023.

17. **Major Conclusions - Seasonal Winter Outlook 2023-24.** Considering PMD's Outlook for Winters-2023, impediments of existing response mechanism, past experiences and predominant factor of global climate change, following can be concluded: -

- a. Normal to slightly above normal precipitation / snowfall
- b. Higher temperatures in high-altitude areas during summers 2023 augmented with higher-than-normal temperatures during winters will cause: -
 - (1) Weakened snow masses resulting higher chances of avalanches and increased possibility of GLOF events in vulnerable valleys during Spring-Summer 2024.
 - (2) Weakened snow masses coupled with rains may generate isolated flash floods and induce landslides in vulnerable areas.
- c. Timely issuance of qualitative weather forecasts / alerts by PMD will be essential to ensure effective early warning for persons living in vulnerable areas.
- d. All stakeholders to conduct mock / table-top exercises to practice coordination and response mechanism down to grassroots level.

- e. Planning of and undertaking reconnaissance with all stakeholders to develop area orientation will be effective for timely and efficient response.
- f. Seasonal forecast / outlook will be updated on monthly basis by PMD, therefore all concerned will be required to update their respective contingency plans for keeping their preparation in accordance with perceived outlook (if a major change is reflected in PMD's forecast).

Winters 2023-24 Contingencies

18. **Visualized Contingencies.** Visualised contingency scenarios derived from PMD's Outlook are as under: -

- a. **Scenario-1 (Most Likely) - Slightly Below Normal to Normal**
 - (1) The northern regions (KP, GB, Punjab, AJ&K) have near normal rain / snowfall.
 - (2) Southern Punjab, and Sindh will experience less than normal rainfall, while Balochistan will experience near normal-to-normal snowfall in mountainous region.
 - (3) Overall trend of decreasing wintertime temperatures.
 - (4) Low-lying plain areas with fog or mist.
 - (5) Windstorms that may mix up dust are predicted for Southern Punjab and Northern Sindh.
 - (6) Extreme winter weather occurrences (blizzards, cold waves, ice storms, and hailstorms) being possible in North.
 - (7) Avalanche danger because of warmer-than-average temperatures in the north.
 - (8) Areas of Punjab affected by smog.
 - (9) Cold, dry weather makes air quality worse and lowers the quality of the air in impacted places especially Punjab.
 - (10) Cold and relatively dry weather conditions will exasperate the smog conditions, further reducing the air quality index of affected areas.
- b. **Scenario- 2 (Less Likely) - Normal**
 - (1) Normal rainfall / snow in northern parts of the country; Khyber Pakhtunkhwa, Gilgit Baltistan, Punjab (Murree) and AJ&K.
 - (2) Expected near average temperatures for winters 2023-24.
 - (3) Low-lying plains with early-season fog or mist.
 - (4) Less strong windstorms in Northern Sindh and Southern Punjab that generate dust.
 - (5) Dry and cold weather exacerbating smog in Punjab, reducing air quality.

- (6) Avalanches in sensitive places may be caused by above-average temperatures in the northern part of the country.

c. **Scenario-3 (Dangerous) - Above Normal / Extreme Weather Events**

- (1) Above Normal rainfall / snow in northern parts of the country; Khyber Pakhtunkhwa, Gilgit Baltistan, Punjab and AJ&K with increased chances of isolated extreme weather events.
- (2) Normal to Above Normal rainfall in respective southern parts of the country; Southern Punjab and Sindh, whereas Baluchistan to have normal rainfall and snowfall in higher altitudes / mountainous areas.
- (3) Temperatures to decline at rapid pace during winter season.
- (4) Development of fog / mist in low-lying / plain areas of the country with lesser intensity during earlier part of the season.
- (5) Potential cold-waves to exasperate winter situation nationwide causing rapid decrease in temperatures and increasing strain on heating fuel for homes.
- (6) Wet spells in colder temperatures may lead to freezing rains/ ice-storms or hailstorms in upper parts of the country which may jeopardise above-ground electrical lines due to icing. Furthermore, roads may experience forming of “black-ice” making driving conditions hazardous / slippery.
- (7) Very Heavy snowfall with chances of Blizzards in northern parts of the country; Khyber Pakhtunkhwa, Gilgit Baltistan, Murree Region & higher altitude / mountainous areas of Baluchistan and of AJ&K.
- (8) Greater chances of people / communities being cut-off due to heavy precipitation / snowfall.
- (9) Severe damage to communication infrastructure (roads and telecom).

19. **Provincial / District Hazards and Vulnerability Maps.** Provincial / district hazard and vulnerability maps are essential part of preparedness. These maps are created on the basis of historical data of affected areas, extent of damage, population density and housing units. It indicates different hazard zones (Very High, High, Medium, Low and Very Low) that have been identified after the analysis, showing possible level of likely hazards in respective area.

PART III - NATIONAL RESPONSE GUIDELINES FOR WINTERS-2023/24

20. National and provincial response guidelines for winters' contingency scenarios are as per the Seasonal Winters' Outlook 2023 / 24 generated by PMD, comprising different phases, which are covered in following paragraphs.

Preparedness Phase

21. **Major Actions.** Following measures are essential for proactive preparations by all stakeholders: -

- a. **Resource Mapping.** Resource mapping of respective Provinces / State and its timely intimation to NDMA.
- b. **Placement of Earth Moving Machinery.** Placement of earth moving machinery at vulnerable areas for timely clearance of roads from landslides / debris.
- c. **Coordination Conferences.** Special conferences by relevant stakeholders on occurrence of any extreme events will assist timely decision-making process.
- d. **Conduct of Mock Exercises and Reconnaissance.** It is critical for all responders to carryout reconnaissance of the vulnerable areas to develop acquaintance with the area and gather local information.
- e. **Provision of Timely Information.** Timely provision of occurrence based SITREP by PDMA's / GDMA / SDMA / ICT. PDMA's / GDMA / SDMA / ICT to make use of NDMA's standardized SITREP format, which will be forwarded separately for all stakeholders. Uniformity of data reporting format enables quick compilation, timely reporting and generating adequate response.
- f. **Updating of Database.** DDMA's to update miscellaneous data which may be needed during disaster response e.g. database of volunteers, miscellaneous resources, medicinal / health facilities, warehouses etc.
- g. **Baseline Data.** For calculating accurate effects/ impacts of disasters/ emergency impacts it is essential to have baseline data for comparison with the post emergency / disaster situation.
- h. **Awareness Campaign.** Every possible mean; especially the one more effective in respective regions, must be utilised for raising awareness among masses.

22. **Measures against Winter Hazards.** Following protective measures based on past experiences will help to mitigate disaster / losses: -

- a. Preparation of hazard maps of major cities, districts and known vulnerable areas based on recorded history for sensitization, awareness, early warning and evacuation of vulnerable communities.
- b. Identification of vulnerable areas especially near communication arteries and population.
- c. Awareness and sensitizing local community and tourists of possible risks and adherence to laid down guidelines.
- d. Community based early warning system as part of response mechanism be instituted in landslide / avalanche prone areas by nominating local notables to ensure that alerts are timely disseminated. Measures may include use of watchmen, loudspeakers/megaphones, loudspeakers of Mosques, whistles, SMS alerts, telephone and any other arrangements of similar nature.
- e. Capacity building of Municipal Corporations with due attention to availability of requisite number of heavy-duty machineries for pre-placing / deployment at most vulnerable areas.
- f. Widening, dredging and de-silting of water channels to prevent waterlogging and saturating soil.
- g. Removal of encroachments / hinderances to provide full access / way to traffic and rescue personals with their machinery when in case of need.
- h. Serviceability and operability of available machinery with sufficient fuel etc.
- i. Provision of backup electricity arrangements in form of generators.
- j. Establishment of committees for planning and implementation of contingency plans at municipal level.
- k. Provision of dedicated manpower for DM management.
- l. Identification of likely evacuation sites and relief / medical camps.
- m. Coordination with all stakeholders for keeping communication arteries open and immediate mobilization of required machinery in time of need.
- n. Identification and coordination with local health officials for stocking medicine, in case of being cut off or likely outbreak of health emergency, especially against diseases likely in winters.

- o. Availability of paramedics and ambulances with respective district health departments.
- p. Coordination with private and government hospitals to prepare a synergized plan for meeting emergent requirements.
- q. Measures for creating redundancy in utility supply to inaccessible areas especially drinking water.
- r. Pruning of trees especially ones close to roads, electricity supply lines, homes and other infrastructure.
- s. Emergency contact numbers of local and other emergency services must be displayed at various locations and made part of all coordination meetings for maximum awareness.
- t. Fixing of loose billboards, hoardings, sign posts and other similar fixtures must be ensured.
- u. Encouragement of communities to remain indoor and restrict movement immediately upon development of weather and especially when a weather advisory / alert is issued.
- v. Vulnerability based stocking be carried out under local administration and line departments.
- w. Utilization of all possible platforms for spreading required information and keep local radio stations involved in relaying critical information.

Early Warning Phase

23. **Early Warning / Advisories.** PMD will be the focal organization for providing weather based early warnings (no other agency can issue any forecast on weather and only PMD's weather alert will be relayed by stakeholders) while NDMA will issue basic instructions for all DM stakeholders, while provincial / district DM authorities and line departments will be responsible for issuing and implementing area / region specific instructions for effective coordination / actions:-

- a. Seasonal outlook will be updated by PMD, at least once a month, especially highlighting a major departure from original outlook.
- b. Weather advisory will be issued as per developing situation by PMD.
- c. Specific weather advisory of PMD and NDMA will be issued by respective PDMA's to disseminate warning to district authorities / relevant stakeholders via **Fax / Email / Telephone / SMS / WhatsApp Message / Twitter** and will be immediately uploaded on their website / portals.
- d. NDMA and PMD will also release breaking caption / news or tickers to all major TV stations / channels including PTV. Moreover, PMD has also constructed a fully equipped

studio for TV broadcast in its own building. Radio broadcasts will also be used from national and FM radio stations to keep the public aware of any upcoming disaster and related advisories.

- e. PMD will nominate a focal person authorized to deal with weather and flood forecast which will be notified to all concerned and will be readily available to all stakeholders, when required.
- f. PMD will also critically analyse and share any possibility of blizzards & cold waves in the country and will timely intimate the same to NDMA and other relevant stakeholders.

24. Community Early Warning through Advisories

- a. Public Service Messages (PSMs) through print / electronic media must be generated forthwith by PDMA / SDMA / GBDMA, DDMA and relevant ministries and departments.
- b. Bill-boards, posters, banners, brochures and warning signs may be used to educate / warn people of at-risk areas.
- c. All concerned departments and local communities must be apprised about the forecast and it's likely unfolding at the onset.
- d. Community must be informed about safer places, relief camps and evacuation plans by concerned departments.
- e. To ward off "**False Warning**", all DM authorities will ensure implementation of Clause 35 of NDM Act 2010.
- f. Community based indigenous early warning system must be institutionalized as part of response mechanism in areas vulnerable to landslides and avalanches by following means:-
 - (1) Placing of around the clock lookouts especially at night or during the period of intense rain / snow.
 - (2) Use of sirens or announcements on loud speakers from mosques and vehicles for mass awareness and sensitizing local communities. These measures will be ensured by all DDMA.
 - (3) Lightening of fire and drum beating by the people living at higher places in such areas.
 - (4) Practicing of evacuation drills.
 - (5) Conduct of mock exercises and reconnaissance of vulnerable/ at-risk areas.
- g. Issuance of SMS Alerts through PTA in only affected & threatened areas using GIS fencing.

Response - Rescue, Relief and Early Recovery Phases

25. **Tiers of Response.** The national contingency response plan have been evolved keeping in mind the structural challenges in response mechanism and experiences of past floods. National response will be based on following tiers: -

- a. **1st Tier.** Local emergency response by DDMA's with the support of district / provincial / Armed Forces resources.
- b. **2nd Tier.** Provincial effort in support of district authorities.
- c. **3rd Tier.** NDMA response (national efforts / national resources) in support of Province(s), GB, AJ&K and ICT with / without external assistance.

26. **Disaster Management (DM) Planning**

- a. PDMA's to ensure resource mapping of volunteers (Civil Defence, Pakistan Red Crescent Society (PRCS), Boy Scouts & Girl Guides), UN Agencies, NGOs / INGOs and ambulances at district level.
- b. Coordination must be carried out with Civil Defence, PRCS, Pakistan Boy Scouts Association and Pakistan Girl Guides Association at district level to provide support at various relief camps under the overall guidance and supervision of the district administration.
- c. Location of relief camps must be earmarked and necessary administrative arrangements be made accordingly. It must be incorporated on past experiences and should be need based. Relief camps should be accessible / closer to main arteries so that relief goods are easily delivered to the affected people.
- d. Fool proof measures be planned against rains / flash floods in relief camps established for Temporarily Displaced Persons (TDPs).
- e. Resource Mapping and prepositioning of dedicated earth moving machinery at landslide / avalanche erosion prone highways / link roads and isolated mountainous areas of KP, AJ&K and GB by respective Governments. Ministry of Communications, NHA, FWO, respective Communication and Works Departments and other relevant organizations to ensure such arrangements alongside Bailey Bridges and enhanced number of maintenance teams at all critical sections especially regions highlighted in hazard maps.
- f. Contingency Plans be updated by all concerned based on NDMA's National Contingency Plan-Winters 2023/24 as well as respective SOPs. Provincial / State / GB and ICT plans will be shared with NDMA and relevant stakeholders by last week of November. All

provincial / State / GB authorities will be responsible to collect and analyse respective the DDMA plans.

- g. To identify most vulnerable communities for sensitization, awareness, early warning and evacuation in emergency, district hazard maps must be updated down to the union council level.
- h. Planning for the needs and concerns of vulnerable groups be made on the basis of available authenticated gender, age and disabled disaggregated data at district level.

27. **Mitigation Works / Schemes**. All projects and schemes underway must be completed immediately. PDMA / SDMA / GBDMA and ICT administration to formulate monitoring mechanism for immediate completion, where possible and taking required measures for maximum safety where the projects / schemes are likely to complete later (during / after the season).

28. **Rescue Measures**

- a. Availability and serviceability of rescue equipment will be ensured by all concerned.
- b. Respective departments / organizations / parent ministries / federal departments will be responsible to carryout audit of equipment held with sub-departments and expedite measures to make up deficiencies through procurement / coordination.
- c. Equipment will be strategically placed so as to respond to contingencies in different regions.
- d. Availability of trained operators must be coordinated and ensured during entire season.
- e. Readiness of Urban Search and Rescue (USAR) teams will be ensured for rescue operations in collapsed buildings / landslides in respective province or other provinces (when requisitioned).
- f. Availability of staff of all relevant departments especially hospitals and emergency services on holidays and during active weather systems must be ensured.
- g. PDMA / SDMA / GBDMA / ICT administration and ICT administration will incorporate input from Rescue 1122, emergency services, civil defence, volunteers and police / law enforcement agencies during planning process for effective coordination during response/ rescue operations.
- h. PDMA / SDMA / GBDMA / ICT administration will coordinate with respective governments / departments for aerial support for immediate evacuation.
- i. Aviation effort can be requisitioned through NDMA. Expenditures will be borne by respective province / region.

29. Salient Preventive Measures

- a. Communities at-risk / vulnerable to landslides / avalanches, seasonal nullahs / river plains must be identified by local administration in collaboration with communities.
- b. Evacuation plans and identification of relief camps must also be carried out in coordination with local communities to maintain awareness and facilitate early evacuations when required.
- c. Travellers be advised to maintain a bag containing important utility items like first aid kit, medicines, dry ration, water, charged torch, radio set, mobile phone, power-bank, cells / batteries, match box, candles, charged batteries, mosquito repellent / net, warm clothes, plastic sheet and important documents including CNIC and some cash money should always be taken along during trips.
- d. Preventive measures against infectious / skin diseases, cholera, COVID-19 and other seasonal likely diseases etc must be taken and vaccination done at first instance.
- e. Animal vaccination along with arrangements of fodder be made in time.

30. Rescue Operations

- a. Forced evacuation must be planned in case of limited warning time, by utilising all available resources at provincial / district levels.
- b. DDMAAs as first responders should mobilize communities for disaster response. This will encourage community involvement, strengthen their own efforts and also address the issue of absence of human resource.
- c. Priority in rescue / evacuation will be given to vulnerable groups (age, disabled, women and children).
- d. Ministry of Communications, NHA, FWO, Pakistan Railways, PTA and Pakistan Post will restore the communication infrastructure / alternate routes / means of delivery, as early as possible. Contingency plans for winters 2023-24 will be devised and shared with NDMA by 2nd Week December 2023.
- e. SUPARCO will provide satellite imageries and assessment of projected developments, where possible. Pre, during and post season snow cover and its impacts will also be compiled and shared with NDMA and relevant ministries / departments.
- f. Traffic arrangements; creating diversions and guidance for tourists, be made for regulating traffic on national and provincial arteries in case of damage to infrastructure by floods.
- g. Disaster tourism must be curbed.

31. **Parameters of Deploying Machinery & Rescue Operations.** Need based rationalization of quantity of heavy machinery deployment be carried out based on factors mentioned below to ensure optimal response against envisaged threat through availability of sufficient reserves at required tier of response: -

- a. PDMA / SDMA / GBDMA / ICT administration to devise internal tiers for response and deployment for deployment and response in coordination with rescuers / responders, volunteers, line departments, internal resources, traffic police, LEAs and local Pak Army Formations.
- b. Respective provinces to ensure establishing the requirement and coordinating availability of machinery vis-à-vis threat / vulnerability / risk assessment.
- c. All supporting agencies to maintain the capability based on the need of the provinces.
- d. PDMA / SDMA / GBDMA and ICT administration must prioritise districts as High Threat (Priority-I), Medium Threat (Priority-II) and Low Threat (Priority-III) based on following aspects: -
 - (1) Historical record of last 30 years.
 - (2) Population density.
 - (3) Urban / rural divide.
 - (4) Type of hazard-based vulnerability.
 - (5) Degree of vulnerability and exposure e.g. population centres in proximity of landslide / avalanche prone areas .
 - (6) Reaction time for deployment.
- e. Response action will have following sequence: -
 - (1) **1st Tier - Immediate Response (Immediate but Not Later than 30-40 Minutes).**
By District Administration through Rescue 1122 (if held), Police or trained Volunteers (if held), Civil Defence.
 - (2) **2nd Tier - Build up Response (Immediate but Not Later than 1-2 Hours)** By Armed Forces / Civil Armed Forces in vicinity, when requisitioned. Alongside, PDMA may shift the resources of respective province from other less threatened districts.
- f. **Priority of Districts.** The priority will be established by respective provinces after due deliberation / consultation and will shared with all stakeholders for standardized planning. The priority should be based on districts with historic record and occurrences with greater frequency and magnitude: -

- (1) Priority - I Districts (High Threat).
- (2) Priority - II Districts (Medium Threat).
- (3) Priority - III Districts (Low Threat).

32. **Relief Operations.** All stakeholders should incorporate NDMA's Guidelines on Multi-Sector Initial Rapid Assessment (MIRA), Minimum Standards of Relief in Camp and Ex-gratia Assistance to the persons affected by natural and man-made disasters, in their respective plans. Moreover, special attention may also be given to following: -

- a. A standardized food pack must be designed as per local requirements to meet the needs of affected persons. Energy biscuits and other such food items which are not part of the daily diet of local community, be avoided. Instead, items like rice, wheat bags, ghee and milk for babies etc should be included.
- b. Water purification tablets and filtration systems for the provision of clean drinking water to affected people must be stocked in advance.
- c. Relief management is the most significant part of response to any disaster. The main purpose of the relief management is to provide life sustaining commodities to the affected communities through a fair and organized system; therefore, distribution method should be decided in consultation with local communities.
- d. Based on past experiences, need must be formalized and the list of relief goods should be available with all DDMA's and displayed on websites to facilitate donors to provide need-based relief goods in emergency.
- e. Relief packages should be according to the region's cultural context and food requirements be ensured for lactating mothers, pregnant women, infants, children and elderly persons. Stockpiling and contingency planning should incorporate special needs of older persons and persons with disabilities particularly with regards to special equipment such as wheel chairs etc and must be able to cater for the needs of family, as a whole.
- f. Trained community level teams should assist in planning and setting up emergency shelters, distributing relief among the affected people, identifying missing people and addressing needs of education, health care, water supply, sanitation and food etc of the affected community. Relief teams should also engage active women from within the community in distribution of food in the relief camps.
- g. Minimum Initial Service Package (MISP) is an international standard of care which is normally implemented at the onset of every emergency to reduce mortality, morbidity

and disability among populations (particularly women and girls) affected by crises. This can be achieved by increasing the provincial and district capacity to implement the MISIP during disasters, creating a data bank of trainers and trainings, strengthening the coordination stakeholders for responding in a timely and effective manner.

- h. Emergency preparedness planning within the education sector is a critical step towards ensuring access to quality education for all learners in times of crises. Minimum standards / guidelines on education in emergencies may be put in place to enable continuity of structured learning during disasters.
- i. Dignity of all the affected persons should be especially ensured during all relief phases of rescue / relief / early recovery etc.
- j. Disease early warning system to be put in place by provincial health departments, once a situation arises. National Health Emergency Preparedness and Response Network (NHEPRN) should establish liaison and necessary coordination with provincial health authorities. District and city administration should prepare for upcoming season in advance in coordination with health departments.
- k. Health authorities must ensure stockpiling of medicines, vaccines in all health facilities with placement at lowest possible tier for distribution.
- l. Supply chain of relief goods must be maintained and followed in true letter and spirit. DDMA's are the first tier supported by PDMA's to provide immediate relief. Similarly, second tier (PDMA's supported by NDMA) should be ready to render assistance once the stocks of DDMA's are exhausted. Third Tier of NDMA supported by national resources to extend relief support required by the provinces / regions.
 - (1) NDMA maintains its stocks at strategic locations.
 - (2) PDMA's are responsible to collect the stocks once released by NDMA from a particular location.
 - (3) NDMA stocks will be requisitioned only in case of extreme emergency and with sufficient reaction time.
 - (4) Distribution of NFIs at site must be avoided. People must be motivated to come to relief camps.
 - (5) At no point of time would NDMA's stocks placed in mutually shared warehouses to be utilized without prior approval of NDMA.

33. **Relief Goods - Non-Food Items (NFIs)**

- a. Logistics caseloads will be worked out on average relief rendered during hazards experienced in respective districts/ regions / provinces by all PDMAs/ SDMA/ GBDMA and ICT administration.
- b. Stockpiling of relief goods (NFIs) on envisaged caseload will be ensured at district level by Provincial / State / GB DMAs.
- c. An effective mechanism of supply chain management must be established including prequalified suppliers for provision of food items, relief goods (NFIs) and transport contractors for emergency transportation.
- d. Federating Units including AJ&K and GB must ensure stocking of sufficient quantity of wheat and food items before 30 November 2023 in vulnerable areas, owing to possible severance of road links.
- e. Pakistan Utility Stores Corporation (USC) and Canteen Stores Department (CSD) will forward resource mapping along with inventory of items, contingency plan including capability of mobile utility stores to NDMA, PDMA and all concerned DDMA by 10 December 2023. USC will further ensure maintenance of sufficient stock levels and supply chain to support community in all flood prone areas especially far-flung areas of KP, GB, AJ&K and Baluchistan.

34. **Early Recovery / Damage Assessment**. MIRA is the first step of the Assessment & Monitoring Framework designed to identify strategic humanitarian priorities including scale of a disaster, priority areas of assistance and identify gaps in disaster response after the onset of natural disasters or complex emergencies. NDMA and UNOCHA has developed MIRA with the aim of sharing common procedures and assessment methodology for needs data collection as under: -

- a. In case of need, MIRA module will be deployed for which PDMAs / DDMA will be required to provide requisite human resource, trained for the module.
- b. Rapid assessment will be carried out by NDMA / PDMA / UN / INGOs / NGOs to identify needs and priorities of affected and vulnerable communities.
- c. Initial report will be shared with Disaster Management Authorities within one week and final report within two weeks.

35. **Needs & Concerns of Vulnerable Groups**. Following aspects must be kept in special focus during all stages of flood management: -

- a. Relief sites and camps should ensure attention to women's security / privacy needs like separate wash-rooms with locks, adequate lights, water and sanitation facilities etc.

- b. Women's fair and equitable access to basic services should be ensured, particularly in health and hygiene.
- c. Female doctors and psychosocial support personnel should be made available for women and children.
- d. Mobile medical units equipped with safe delivery, post-natal facilities and referral should be in place.
- e. Camp management agency should ensure that the registration, profiling and mapping systems record disaggregated data on age, gender and vulnerabilities so as to identify people with specific needs at the earlier stages of entering in the camp site and throughout the duration of camp stay.

Coordination Aspects

36. **Inter Provincial / Regional Coordination**. During management of disasters, inter provincial / regional coordination mechanism is essential to acquire assistance for affected areas especially in far flung regions for immediate availability of nearby resources in shortest possible time thus reducing sufferings of distressed population. Information about resources of neighbouring provincial / regional government departments must be coordinated by DM stakeholders based on their respective vulnerability and these aspects need to be incorporated in contingency/ response plans.

37. **Coordination Spectrum**

- a. All stakeholders will monitor situation by activation of Emergency Operation Centres (EOCs). EOCs will be activated by NDMA, PDMA/ SDMA / GBDMA/ ICT and DDMA, Line departments/ concerned ministries, LEAs and Pakistan Armed Forces and all relevant stakeholders as per respective SOPs.
- b. All stakeholders will nominate respective Liaison Officers (LOs) for National Emergency Operation Centre (NEOC) by 30 November 2023.
- c. Daily coordination conference will be organized by NDMA in case of an emergency / disaster in NEOC at 1000 hours. All LOs will attend and brief the conference.
- d. Information about any significant event will be interpreted and shared by PMD with NDMA.
- e. All significant information will be immediately passed to NEOC by respective PDMA.
- f. Facility of a Cloud Based Video Conference System e.g. Google Meet, Microsoft Team, WebEx & Zoom etc is available at NDMA. Necessary hardware (Cameras) and Software are held with PDMA/ DM stakeholders to connect to the NDMA. Same may be utilized

for effective communication when required. Necessary details of the system are as under: -

- (1) Point of Contact (POC): ICT Directorate NDMA.
- (2) Alternate Skype ID: ndmapk.
- (3) Prior coordination for setting up of video conference besides its testing is required as per SOP.

g. **Coordination with UN Agencies and INGOs / NGOs**

- (1) Support of UN Agencies and INGOs / NGOs will be utilised in a coordinated manner, mostly in preparedness, relief, post disaster assessments and rehabilitation phases.
- (2) Capabilities of each organization must be ascertained to ensure its optimal utilisation.
- (3) Need based employment of UN Agencies will be regulated by NDMA and PDMA.
- (4) NGOs / INGOs duly cleared / approved by concerned ministries will be allowed to assist in relief operations.

38. **Reports and Returns**

- a. All PDMA / SDMA / GBDMA and ICT Administration will ensure training of their staff to feed data on the portal and same will be utilised for forming cumulative SITREP during the season.
- b. Until maturity of the online portal data feeding mechanism all will ensure submission of daily SITREP to NEOC by PDMA / DDMA, PMD, FFC, FFD and NHA will be ensured as per already issued NDMA SITREP SOP.
- c. NDMA and PDMA will update the situation on respective websites daily.
- d. SUPARCO will provide the imageries of developing situations on daily basis or immediately availability (affected due to cloud cover etc).
- e. To ensure a coordinated response, National Humanitarian Network (NHN) / Pakistan Humanitarian Forum (PHF) / UN Agencies and PRCS will share location of their stocks and human resource mapping with NDMA / PDMA by **10 December 2023**.
- f. All PDMA / relevant stakeholders will share telephone directory of respective Provinces / Regions with NDMA and host it at respective website by 5 December 2023.

39. **Assistance / Coordination with Ministries / Departments.** Following ministries / departments are requested for assistance as mentioned against each: -

- a. **Ministry of Defence (MoD).** Conduct of relief / rescue operations through Pakistan Armed Forces (helicopters, troops & rescue equipment) when required.
- b. **Ministry of Interior (MoI) & Anti-Narcotics Force (ANF).** Availability of aviation assets for emergency response, at a short notice.
- c. **Pakistan Electronic Media Regulatory Authority (PEMRA).** Airing of public service messages for community awareness on all media channels during prime hours.
- d. **Pakistan Telecommunication Authority (PTA).** To facilitate generation of SMS alerts for early warning, emergency relief and evacuation to required populace.
- e. **Pakistan Tourism Development Corporation (PTDC).** Provision of timely weather / flood related information to tourists including protection from dangers of flash floods, landslides, GLOF etc and help evacuation of stranded tourists through local Government / Pakistan Armed Forces.
- f. **Ministry of Communication (MoC).** To conduct assessment for early restoration of communication infrastructure and remain prepared to shift earth moving machinery to affected areas.
- g. **Ministry of Railways (MoR).** To monitor railway tracks on regular basis and assist transportation of relief goods to affected areas.
- h. **Press Information Department (PID).** Assist in running of awareness campaign through electronic and print media.
- i. **Ministry of National Health Services, Regulation & Coordination (MoNHSRC).** Coordination for deployment of medical teams and equipment.

40. **Requisitioning of Armed Forces.** Armed Forces will be requisitioned subject to provision of rules / regulations by PDMA's / DDMA's only in case of emergency. Aviation support will be coordinated centrally by NDMA based on request of provinces and regions when called to assist in "Aid to Civil Power" under Article 245 of Pakistan's Constitution. Authorities utilizing services from Armed Forces will bear the cost of assets used which will be processed immediately after their employment. Armed Forces will be employed for following: -

- a. Rescue and relief operations by Field Units of Pakistan Army, Pakistan Navy and Pakistan Air Force.
- b. Aviation support including provision of C-130 by Pakistan Air Force.
- c. Support of rescue and medical teams of Armed Forces.

- d. Medical support teams of all three services.
- e. Search and rescue in urban areas collapsed structures and landslides / avalanches by USAR team of Pakistan Army.

41. **Information Management**

- a. NDMA, Provincial / State / GB DMAs will update respective websites on daily basis during entire season.
- b. In case of a significant activity / event, it will be updated on 6 hourly bases.
- c. Print and electronic media / internet be utilized for dissemination of timely and accurate information.
- d. Regular press releases, media tickers and press briefings will be ensured to present real time picture of ongoing activities, developing situations and losses / damages, if any.
- e. To ensure post transmission record as well as redundancy, information will be disseminated through SMS, emails, fax and telephones.
- f. SMS / WhatsApp Groups of relevant stakeholders will be made to ensure real time information sharing.
- g. This plan is also available at NDMA website www.ndma.gov.pk.

Conclusion

42. In the context of the upcoming 2023-2024 season, Pakistan finds itself situated in a region where the frequency of extreme weather events has witnessed a concerning uptick in recent years. It is noteworthy that despite contributing less than 1% of global greenhouse emissions, Pakistan ranks as the seventh most vulnerable state to the adverse impacts of climate change. These realities underscore the urgent necessity for an efficient, proactive, and well-coordinated response mechanism, a collaborative effort that brings together all stakeholders.

43. Drawing from past experiences and considering the higher number of extreme climatic events experienced in 2023, the imperative to address this challenge is now more pronounced than ever. It is evident that climate-related hazards pose significant risks to both the populace and vital infrastructure in Pakistan.

44. To mitigate these risks and enhance resilience in the face of a rapidly changing climate, the focus must be on preparedness, timely early warning systems, and the development of a well-orchestrated response strategy capable of adapting to evolving situations.

45. As we look ahead to the 2023-2024 season, we must recognize that the challenges presented by climate change are dynamic and multifaceted. Collaborative efforts, knowledge sharing, and a collective resolve to safeguard the lives and property of our citizens will be paramount in navigating the challenges that lie ahead. This necessitates the active participation and commitment of government agencies, local communities, non-governmental organizations, and international partners to work together effectively in a concerted response to climate-related hazards. By doing so, we can collectively strive to build a more resilient and sustainable future for Pakistan.

Government of Pakistan
Prime Minister's Office
National Disaster Management Authority
Islamabad
Dated: 15 November 2023



Brigadier
For Chairman NDMA
(Muhammad Umar Chattha)
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Distribution List. Attached.

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10.	Headquarters Sindh Rangers (Operations Branch), Karachi	1
11.	Headquarters Frontier Corps (Operations Branch), KP (North), Peshawar	1
12.	Headquarters Frontier Corps (Operations Branch), KP (South), D.I. Khan	1
13.	Headquarters Frontier Corps (Operations Branch), Balochistan (North), Quetta	1
14.	Headquarters Frontier Corps (Operations Branch), Balochistan (South), Turbat	1
15.	Frontier Constabulary, Peshawar	1

NDMA Plan for Disaster Contingencies - Winter 2023/24

Ser	Department / Agencies	No of Copies
16.	Commanding Officer, 6 Army Aviation Squadron, Islamabad	1
17.	Headquarters Anti Narcotic Force (Operation Branch), Rawalpindi	1
<u>Internal</u>		
1.	PS to Chairman, NDMA	1
2.	Chief of Staff, NDMA	1
3.	Member (Operations), NDMA	1
4.	Member (A&F), NDMA	1
5.	Member (DRR), NDMA	1
6.	Senior Capacity Building Specialist (NIDM / PMU / Media)	1
7.	Director (Response), NDMA	5
8.	Director (Logistics), NDMA	1
9.	Director (R&R), NDMA	1
10.	Director (Administration), NDMA	1
11.	Director (Finance), NDMA	1
12.	Director (Implementation), NDMA	1
13.	Project Manager (GCC), NDMA	1
14.	Deputy Director (Procurement), NDMA	1
15.	Deputy Director (ICT), NDMA	1
16.	Media Advisor, NDMA	1

NDM ACT 2010 CLAUSE-9

Powers and Functions of the National Disaster Management Authority. The National Authority shall:-

- (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, co-ordinate 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) co-ordinate 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; and
- (j) perform such other functions as the National Commission may require to perform.