



No. PDMA(S)/7(78)/15/5337
PROVINCIAL DISASTER MANAGEMENT AUTHORITY
REHABILITATION DEPARTMENT
GOVERNMENT OF SINDH
PLOT NO. 26-C, MAIN KHAYABAN-E-JAMI,
DHA PHASE-VII, KARACHI
Phone: 021-99332003-5, Fax: 021-99332007



MOST IMMEDIATE/BY FAX/WHATSAPP

Dated: 24th June, 2024

To,

**The Deputy Commissioner(s)/Chairmen DDMA(s),
All in Sindh.**

Subject **MONSOON WEATHER PROJECTION-JULY 2024**

I am directed to refer to the weather outlook No. F2.(E)/2024-NDMA(MW/Weather-Outlook) dated 22nd June, 2024 (**copy enclosed**) on the subject cited above and to state that the NDMA National Emergencies Operation Centre (NEOC) technical analysis of weather projection for Monsoon Season for the month of July 2024 has been prepared after in-depth analysis of multiple weather models; details of which are forwarded herewith for further necessary actions.

In view of the above, the Deputy Commissioner(s)/ Chairmen DDMA(s) are requested to take necessary precautionary measures as communicated earlier by PDMA Sindh.


(AJAY KUMAR SEWANI)
ASSISTANT DIRECTOR (OPS)

A copy is forwarded for information & necessary action to:

1. The Senior Member Board of Revenue, Government of Sindh, Karachi.
2. The Secretary to Government of Sindh, Home Department, Karachi.
3. The Secretary to Government of Sindh, Health Department, Karachi.
4. The Secretary to Government of Sindh, Irrigation Department, Karachi.
5. The Secretary to Government of Sindh, School Education and Literacy Department, Karachi.
6. The Secretary to Government of Sindh, College Education, Karachi.
7. The Secretary to Government of Sindh, Universities and Boards, Karachi.
8. The Secretary to Government of Sindh, Information and Archives Department, Karachi (With a request for wide publicity through the electronic & print media).
9. The Secretary to Government of Sindh, Environment, Climate Change & Coastal Development Department, Karachi.
10. The Secretary to Government of Sindh, (GA) SGA&CD, Karachi.
11. The Secretary to Government of Sindh, Works and Services Departments Karachi.
12. The Secretary to Government of Sindh, Food Department Karachi.
13. The Secretary to Government of Sindh, Agriculture Department Karachi.
14. The Secretary to Government of Sindh, Livestock & Fisheries Department, Karachi.
15. The Secretary to Government of Sindh, (Planning), Planning and Development Department, Karachi
16. The Inspector General of Police, Sindh, Karachi.
17. The Commissioner(s) All in Sindh.
18. The Director General, Health Services Sindh, at Hyderabad.
19. The Director General, Livestock & Fisheries Sindh, at Hyderabad
20. The Director General, Coastal Development Authority, Government of Sindh, Karachi.
21. The Director General, Pakistan Maritime Security Agency, Karachi.
22. The Director General, Sindh Building Control Authority, Karachi.
23. The Director General, Pakistan Civil Aviation Authority, Karachi.
24. The Director General, Pakistan Meteorological Department, Islamabad.
25. The Director General, Sindh Emergency Rescue Service 1122. Karachi
26. The Head, National Highway Authority, Office Karachi (It is requested to take all necessary precautionary measures as mentioned here-in above).



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27. The Metropolitan Commissioner, Karachi Metropolitan Corporation, Karachi (It is requested to take all necessary precautionary measures as mentioned here-in above).
28. The Administrator, Defense Housing Authority, Karachi (It is requested to take all necessary precautionary measures as mentioned here-in above).
29. The Deputy Secretary (Staff) to Chief Minister Sindh, Karachi.
30. The Deputy Secretary (Staff) to Chief Secretary Sindh, Karachi.
31. The Divisional Superintendent Pakistan Railways, Karachi and Sukkur.
32. The Chief Executive Officer, PPHI, Sindh Karachi.
33. The Chief Executive Officer Sindh Integrated Emergency and Health Services, Karachi.
34. The Chief Executive Officer, Cantonment Board Saddar/ Clifton/ Faisal/ Manora/ Korangi Creek/ Malir, Karachi (It is requested to take all necessary precautionary measures as mentioned here-in above).
35. The Chief Executive Officer(s), Karachi Electric, HESCO, SEPCO.
36. The Chief Executive, Edhi Foundation, Al Mustafa Welfare Trust, Alamgir Welfare Trust, JDC Foundation, Alkhidmat Foundation, Khidmat-e-Khalq Foundation, Pakistan Red Crescent Sindh, Chhipa Welfare Organization.
37. The Head of Office, Pakistan FisherFolk Forum, Karachi.
38. The Director (Response), National Disaster Management Authority, Islamabad.
39. The Head Quarters ComCoast Karachi.
40. The Head Quarters, 5 Corps, Karachi.
41. The Head Quarters ComKar, Pak Navy, Karachi.
42. The Head Quarters Pakistan Rangers, Sindh, Karachi.
43. The PS to Chairman, Planning and Development Board, GoS, Karachi.
44. The PS to Minister, Rehabilitation Department, Karachi.
45. The PS to Secretary to Government Sindh, Rehabilitation Department, Karachi.
46. The PS to Director General, Provincial Disaster Management Authority, Sindh, Karachi.
47. The All Humanitarian Partners (UN Agencies/INGOs/National NGOs/Local NGOs/Humanitarian Organizations


(AJAY KUMAR SEWANI)
ASSISTANT DIRECTOR (OPS)

MOST IMMEDIATE

F2.(E)/2024-NDMA (MW/Weather-Outlook)
Government of Pakistan
Prime Minister's Office
National Disaster Management Authority (HQ)
 Main Murree Road, Near ITP Office, Islamabad

Dated: **22 June 2024**Subject: **Monsoon Weather Projection - July 2024**

Reference: a. *NDMA National Disaster Response Plan 2024/25.*
 b. *NDMA National Monsoon Contingency Plan 2024.*

1. NDMA National Emergencies Operation Centre (NEOC) technical analysis of **weather projections** for **Monsoon Season** for the month of **July 2024** has been prepared after in-depth analysis of multiple weather models; details are covered in ensuing paras. Detailed preparatory and anticipatory actions for response by individuals, communities and all DM responders to heavy rains, torrential rains, flooding etc have already been enumerated in NDMA **National Disaster Response Plan 2024/25** and NDMA **National Monsoon Contingency Plan 2024**. Some of the actions are being covered in this advisory for due emphasis.

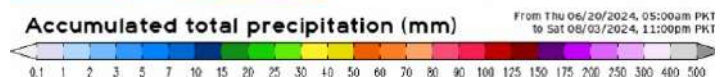
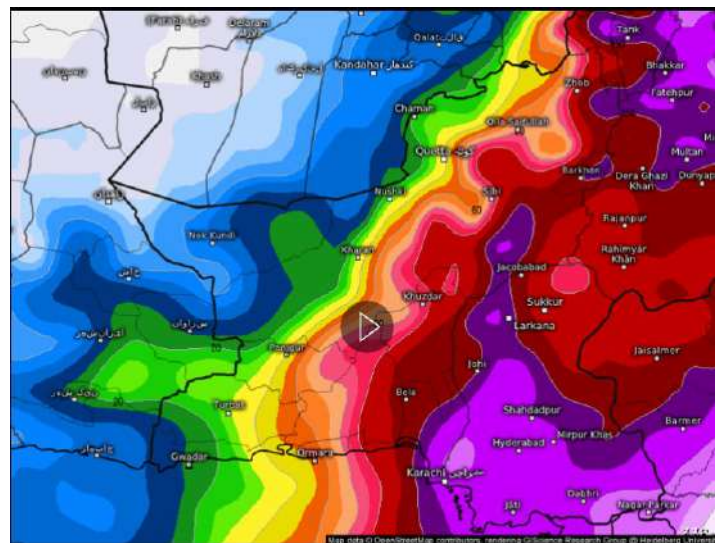
2. **Rains Projections.** Province-wise details of projected weather conditions for the entire month of July 2024 on weekly basis are as under:-

a. **Balochistan**

- (1) **1st Week (approx 15-35 mm rainfall in areas).** Monsoon rains likely to start in **Eastern Balochistan** i.e. **Zhob, Barkhan, Loralai** Divisions with **scattered rains** in **Sibbi & Naseerabad** Divisions; **isolated rains** in **Kalat & Quetta**

Division and **heavier rains** in **Lasbela, Makran & Rakshan** divisions are expected to **receive less rains**.

- (2) **2nd Week (approx 25-50 mm rainfall in areas).** **Heavy monsoon rains** expected in parts of **Loralai & Zhob** Divisions with **flood inducing rains** in **Suleman & Kirthar Ranges**. **Sibbi & Naseerabad** Divisions expected to receive **moderate to heavy rains** with

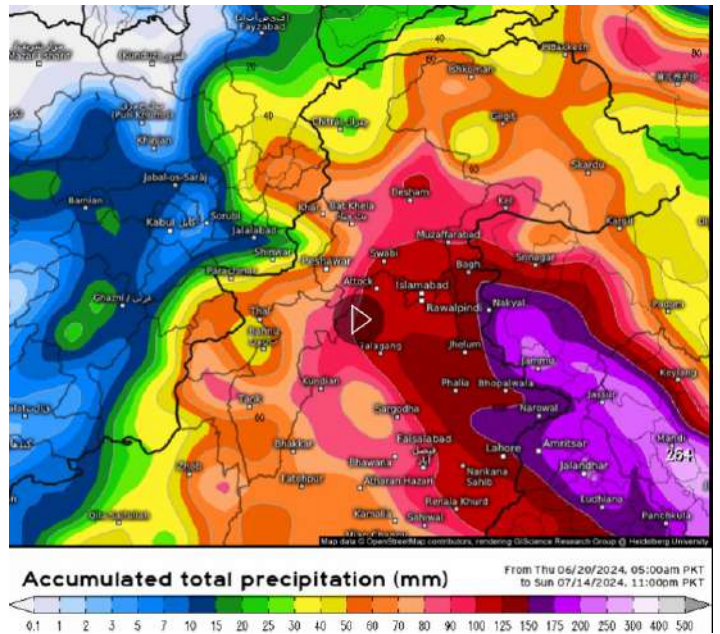


isolated rains in **Kalat** & **Quetta** Divisions. **Scattered rains** are expected in **Makran** Division and **isolated rains** in **Rakhshan** Division.

- (3) **3rd Week (approx 15-25 mm rainfall in areas)**. **Monsoon system** will **remain weak** in most parts with **light rains** in **Zhob, Barkhan & Khuzdar** regions. There are **less chances** of **rains** in **Makran, Kalat, Quetta & Rakshan** Divisions.
- (4) **4th Week (approx 25-50 mm rainfall in areas)**. **Heavy rains** in **Kalat, Makran, Quetta, Naseerabad, Zhob & Sibbi** Divisions.

b. **Khyber Pakhtunkhwa**

- (1) **1st Week (approx 15-50 mm rainfall in areas)**. Monsoon is expected in all parts with **heavy rains** in **Malakand, Hazara & Mardan** Division, **moderate to heavy rains** in **Peshawar, Kohat, Bannu & DI Khan** areas.



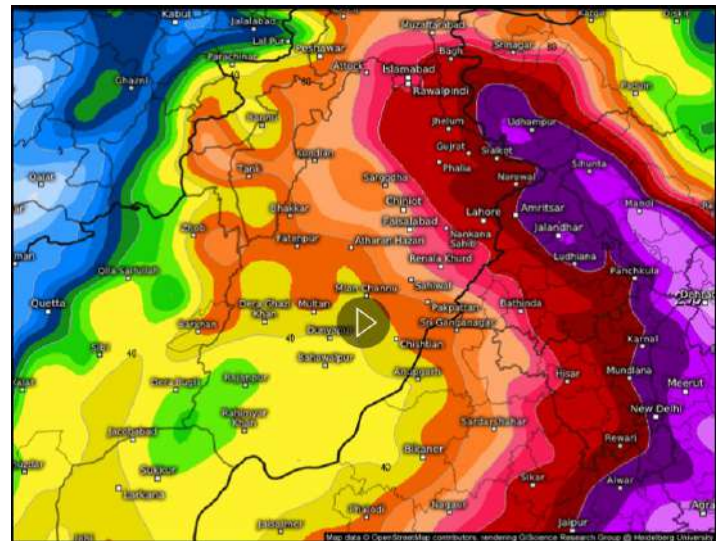
- (2) **2nd Week (approx. 25-35 mm rainfall in areas)**. Monsoon will **remain active** in **Southern KP** including **Bannu & DI Khan** Divisions with **light rains** in **Peshawar & Kohat** Divisions and **lesser intensity** in **Mardan, Malakand & Hazara** Division.

- (3) **3rd Week (approx 15-25 mm rainfall in areas)**. Overall Monsoon will **remain weak** and **isolated rains** in **Malakand & Hazara** Divisions.
- (4) **4th Week (approx 50-70 mm rainfall in areas)**. An **active phase** of monsoon is expected with **heavy to very heavy rains** in **Malakand, Hazara & Mardan** Divisions and **moderate to heavy rains** in **Peshawar, Kohat, Bannu & DI Khan** Divisions.

c. **Punjab & ICT**

- (1) **1st Week (approx 15-50 mm rainfall in areas)**. **Heavy rain spells** are anticipated in **ICT, Rawalpindi, Lahore, Sargodha, Faisalabad & Gujranwala** Divisions. While **intensity** and **duration** of **rains** is expected to be **comparatively lower** in **Multan, DG Khan & Bahawalpur** Divisions.

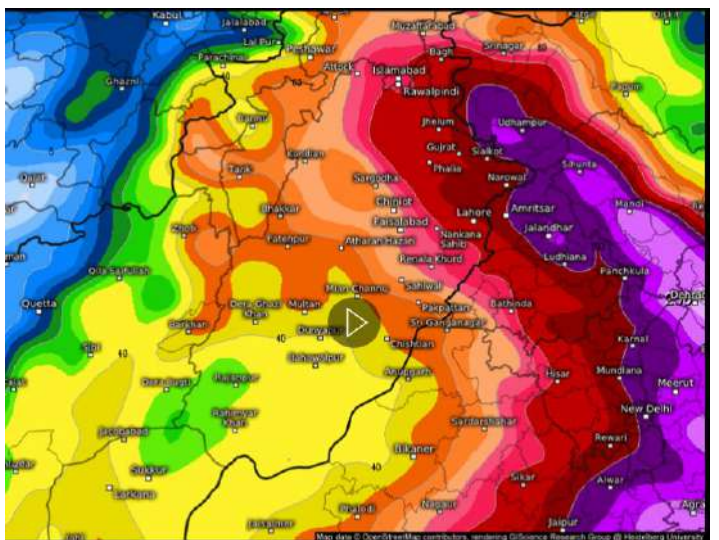
- (2) **2nd Week (approx 25-35 mm rainfall in areas).** **Monsoon** activity will **persist** in **ICT, Rawalpindi, Gujranwala, Sargodha, Lahore & Faisalabad** Divisions. **Isolated rains / showers** are expected in **Multan, DG Khan & Bahawalpur** Divisions.
- (3) **3rd Week (approx 15-25 mm rainfall in areas).** **Monsoon** activity will remain **significant** in **ICT & Upper Punjab**, while there will be **noticeable decrease** in **rains activity** in **Central & South Punjab** as **monsoon enters a weak phase**.
- (4) **4th Week (approx 50-70 mm rainfall in areas).** **Heavy rains may lead to flooding** in **ICT, Rawalpindi, Lahore, Sargodha, Gujranwala & Faisalabad** Divisions. **Hill torrents** in **DG Khan** Division are expected. **Moderate to heavy rains** are forecasted for the **Sahiwal, Multan & Bahawalpur** Divisions.



Accumulated total precipitation (mm) From Wed 06/19/2024, 07:00pm CDT to Fri 07/12/2024, 01:00am CDT

d. **Sindh**

- (1) **1st Week (approx 30-50 mm rainfall in areas).** **Highest intensity rains** in **Mirpurkhas** Division. **Heavy rains** are expected in **Karachi, Hyderabad & Nawabshah** Divisions. **Isolated to scattered rains** expected in **Larkana & Sukkur** regions.
- (2) **2nd Week (approx 35-75 mm rainfall in areas).** **Intense monsoon** activity is expected **across all parts of Sindh**. **Heavy to very heavy rains** are predicted in **Mirpurkhas, Karachi, Hyderabad, Larkana, Sukkur** and **Nawabshah** Divisions.

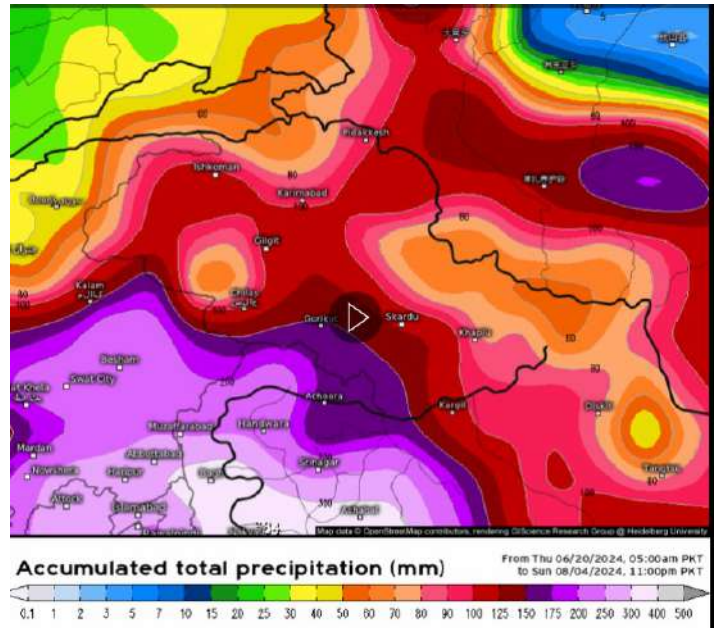


Accumulated total precipitation (mm) From Wed 06/19/2024, 07:00pm CDT to Fri 07/12/2024, 01:00am CDT

- (3) **3rd Week (approx 25-35 mm rainfall in areas).** Monsoon dynamics likely to weaken. Rains will be primarily concentrated in Mirpurkhas & Nawabshah Divisions, with isolated rains in Karachi, Hyderabad, Larkana & Sukkur Divisions.
- (4) **4th Week (approx 45-75 mm rainfall in areas).** Monsoon will remain active. Heavy to very heavy rains spells expected in Karachi & Mirpurkhas Divisions. Scattered rains spells anticipated in Nawabshah, Hyderabad, Sukkur & Larkana Divisions.

e. **Gilgit Baltistan**

- (1) **1st Week (approx 15-30 mm rainfall in areas).** Light to moderate rains expected in all valleys including Gilgit, Skardu, Ghanche, Ghizer, Astore & Gojal.



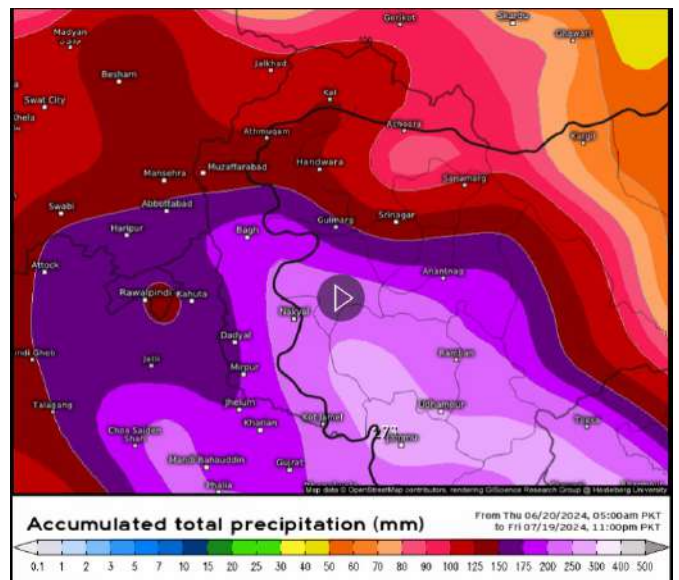
- (2) **2nd Week (approx 15-30 mm rainfall in areas).** Light to moderate rains expected in all valleys including Gilgit, Skardu, Ghanche, Ghizer, Astore & Gojal.

- (3) **3rd Week (approx 10-25 mm rainfall in areas).** Light to occasionally moderate showers in Gilgit, Skardu, Ghanche, Ghizer, Astore & Gojal.

- (4) **4th Week (approx 25-40 mm rainfall in areas).** Low to moderate rains expected in all valleys. Astore region will experience heavy to very heavy rains.

f. **AJ&K**

- (1) **1st Week (approx 30-55 mm rainfall in areas).** Monsoon rains expected across all parts. Heavy rains expected in Muzaffarabad, Poonch, Kotli & Mirpur regions, with moderate to heavy rains expected in Neelum region.



- (2) **2nd Week (approx 35-50 mm rainfall in areas)**. Monsoon rains **expected in all parts**. **Heavy rains** expected in **Muzaffarabad, Poonch, Kotli & Mirpur** regions with **moderate to heavy** in **Neelum**.
- (3) **3rd Week (approx 15-30 mm rainfall in areas)**. Monsoon expected to **remain subdued**, with some **rains** in **Muzaffarabad & Poonch** regions, and **isolated rains** in **Kotli, Mirpur & Neelum** regions.
- (4) **4th Week (approx 40-70 mm rainfall in areas)**. **Heavy to very heavy rains** across **complete AJ&K**, potentially leading to **severe flooding** in **nullahs and rivers**.

3. **Perceived Impacts**. In light of the projected weather conditions, following impacts are expected in aforesaid regions of Pakistan: -

- a. **Moderate to Very Heavy rains** may **increase** the **water flows** in local nullahs / streams / rivers **causing riverine / flash flooding** in vulnerable areas.
- b. **Moderate to Very Heavy rains** may trigger **Hill Torrents** in **vulnerable areas** of **DI Khan, DG Khan, Rajanpur** and along **Suleman** and **Kirthar Ranges**.
- c. **Moderate to Very Heavy Rains** may cause **urban flooding** in vulnerable **urban areas** across the country.
- d. **Moderate to Very Heavy Rains** may **trigger landslides** in the **vulnerable areas** of **Murree, Galiyat, AJ&K, Gilgit Baltistan** and hilly / mountainous areas of **Khyber Pakhtunkhwa** and **Balochistan**.
- e. In light of **increased temperatures** and **forecasted rains** spell in **Gilgit Baltistan** and **Khyber Pakhtunkhwa**, the **flows** of **rivers** and **streams** are **expected to increase** and there is a **higher probability** of **GLOF event triggering** in vulnerable / at-risk valleys.
- f. Dust **storm / wind-thunderstorms & heavy falls** may **cause damage** to loose structures such as electrical poles, solar panels, hoardings, tall trees and under construction buildings.

4. **Pre-cautionary Measures**. All concerned stakeholders / general public are advised to undertake measures to mitigate adverse effects of monsoon rains. **Following measures must be ensured** by all: -

- a. **PMD / FFD / FFC / PCIW / SUPARCO**
 - (1) **Proactive monitoring** of Eastern Rivers and sharing of 12 hourly water flows data with all stakeholders.

- (2) Ensure implementation of **elaborate coordination mechanism** for **preparedness** and **mitigation** through management/ regulation of water reservoirs/ barrages/ headworks and irrigation canals.
- b. **Provincial Irrigation Departments**. Take necessary measures to **manage waterflow** and mitigate **flood risks**, through following: -
- (1) Implementing **effective regulation strategies** at headworks / barrages to optimize the discharge of excess water through irrigation channels.
 - (2) **Proactive monitoring / maintenance / repairs** of canal systems to enhance their capacity to handle increased flows.
 - (3) Undertake **prompt repairs** of any breaches / breaks in flood protective works.
- c. **PDMA's / GBDMA / SDMA and Respective DDMA's**
- (1) Conduct **extensive public awareness campaigns** through multiple channels, including TV / broadcast / social / print media etc., to ensure that vulnerable communities are well-informed about the anticipated flood situation and necessary precautions.
 - (2) Enhance **deployment** of **required machinery, equipment, emergency supplies** and personnel in **at-risk areas**, considering on ground situation.
 - (3) Maintain **sufficient stocks** of **essential supplies**, including food, clean water, medical provisions, and sanitation supplies in case further emergent needs.
 - (4) **Strategically position flood fighting equipment** in areas prone to flooding, ensuring their availability for immediate deployment.
- d. **DM Responders (Local Administrations / Rescue 1122 / LEAs / Line Departments / Armed Forces)**
- (1) Ensure **timely cleaning / de-silting & maintenance** of **sewerage lines, storm water drains** and **nullahs**.
 - (2) Ensure **availability / functionality** of all essential **flood response equipment** in flood-prone areas.
 - (3) Ensure **full staffing / availability** of trained **emergency response personnel** and designate their duties / areas of deployment in case of emergency.
 - (4) Conduct thorough **reconnaissance** of **vulnerable locations, identifying critical infrastructure** / communities that may require additional support and protection.

- (5) Inform and **sensitize residents** of **low-lying areas** / **at-risk communities** of anticipated flood conditions, potential impacts, evacuation procedures and precautionary measures.
 - (6) Establish **temporary shelters** in **safe locations** for **displaced individuals** and ensure these are equipped with necessary supplies (food, clean drinking water, medical supplies and sanitation facilities).
 - (7) Ensure the **availability** of **trained medical staff** and ambulances in **strategic locations** to provide immediate medical assistance to those affected by floods.
- e. **NHA / FWO and Pak Railways**. Continuously **monitor** the **situation** and **implement** all **necessary safety measures** to ensure the **functionality** of **communication arteries** (roads / railway lines / bridges).
- f. **NH&MP**
- (1) Inform **travelers** / **tourists** in **timely manner** regarding anticipated weather / flood conditions, potential hazards, precautionary measures and recommended alternative routes to regulate their travel and ensuring safety.
 - (2) Provide **necessary assistance** and **support** to travelers / tourists affected by flood situation, including **facilitating evacuations** if required.
 - (3) **Coordinate** with Law Enforcement Agencies & Local Administrations to **manage** and **redirect traffic** in affected areas to prevent congestion and **facilitate emergency response** efforts.
- g. **MO / Engrs Dte**
- (1) Undertake **survey** of **inundated areas** and record keeping of **flood limits** for verification of data.
 - (2) **Serviceability** of **flood fighting equipment** for sustainability of response.
 - (3) **Coordinate** with **Rescue 1122** / **DDMAs** to ensure general public stays away from vulnerable / flooded areas.
- h. Proactively **maintain nullahs** / **stormwater drains** to ensure their proper functioning and prevent blockages that may exacerbate flooding.
- i. Ensure **immediate stocking** of **basic commodities**, including paramedics and medicine, especially in regions that are likely to get cut-off during flooding.
- j. Strengthen **coordination among all relevant departments** and **agencies** to facilitate the timely sharing of information and resources during emergency situations.

- k. Establish **reliable communication channels** with **local communities** to provide timely updates, instructions, and emergency contact information.
 - l. Ensure **widespread circulation** of **alerts** and **advisories**, especially in local languages, to raise awareness and sensitize travelers/ tourists and local communities in at-risk / vulnerable areas.
 - m. Ensure **round-the-clock monitoring** of the situation through EOCs with regular feedback to PEOCs and NEOC.
 - n. Share **regular / frequent updates** with **NDMA** in case of any eventuality.
5. **Press Information Department Only**. With the request to **ensure wider circulation** and public awareness.
6. Forwarded for information and necessary action, please.



(Hammad Sadiq Rana)
Director (Response) NDMA

(Distribution List Attached)

DISTRIBUTION LIST

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Director General, Pakistan Meteorological Department, Islamabad
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Director General, National Emergency Health Services, Islamabad
Executive Director, National Institute of Health, Islamabad
Chairman, Federal Flood Commission (FFC), Islamabad
Chairman, National Highway Authority (NHA), Islamabad
Chairman, WAPDA, Lahore
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Director General, Rescue 1122 Gilgit Baltistan, Gilgit
Director General, Rescue 1122 State of AJ&K, Muzaffarabad
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Headquarters, Pakistan Coast Guards (PCG), Karachi