NDMA – MONSOON SEASON 2023 UPDATE NO. 40 (27 JULY – 2000 hrs)
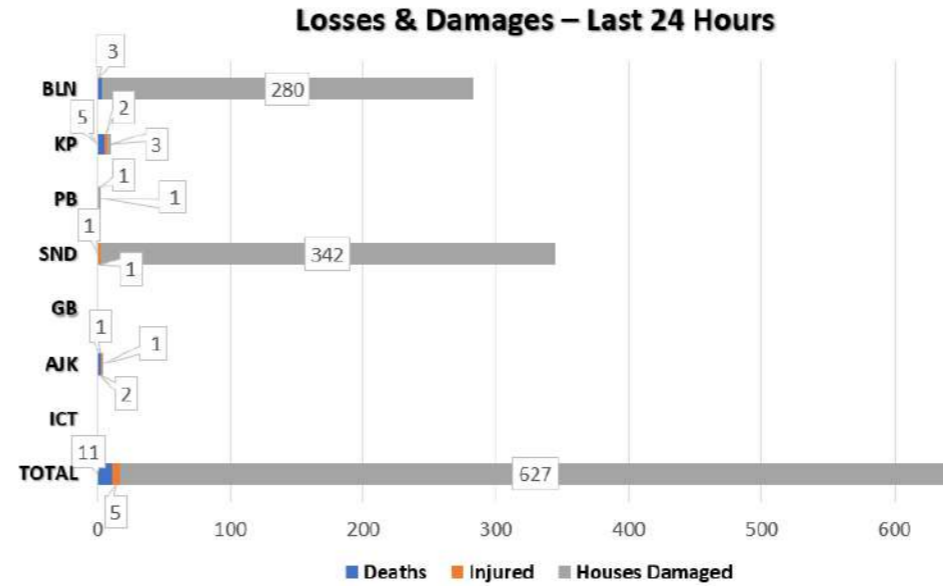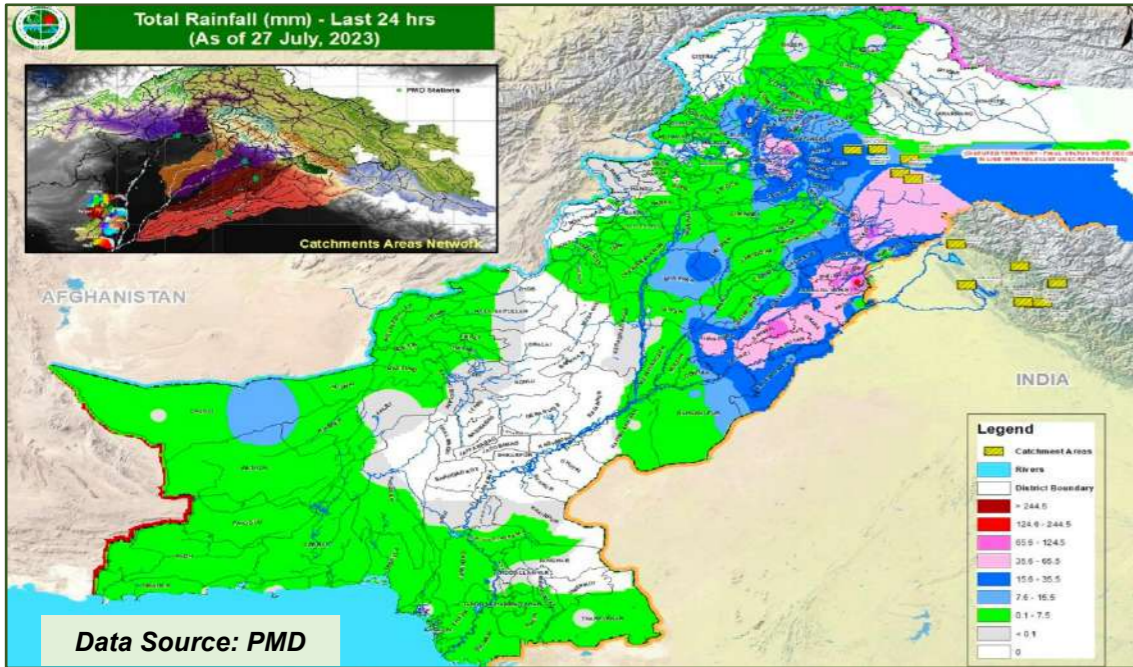

Total Rainfall (mm) - Last 24 hrs (As of 27 July, 2023)

Catchments Areas Network

AFGHANISTAN

INDIA

Legend
- Catchment Areas
- Rivers
- District Boundary
- > 244.5
- 124.6 - 244.5
- 65.6 - 124.5
- 35.6 - 65.5
- 15.6 - 35.5
- 7.6 - 15.5
- 0.1 - 7.5
- < 0.1
- 0

Data Source: PMD

Losses & Damages – Last 24 Hours

(Deaths / Injured / Houses Damaged)

- BLN: 3 / 280
- KP: 5 / 2 / 3
- PB: 1 / 1
- SND: 1 / 342 / 1
- GB: 1 / 1
- AJK: 2
- ICT:
- TOTAL: 11 / 627 / 5

Legend: Deaths, Injured, Houses Damaged

Last 24 Hours Deaths Categorization
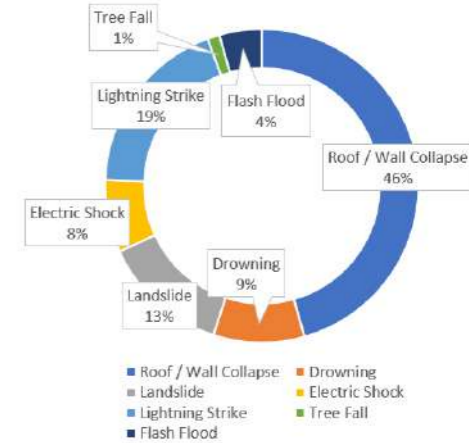
- Drowning 14%
- Flash Flood 29%
- Lightning Strike 14%
- Landslide 43%

Legend: Roof / Wall Collapse, Drowning, Landslide, Electric Shock, Lightning Strike, Tree Fall, Flash Flood
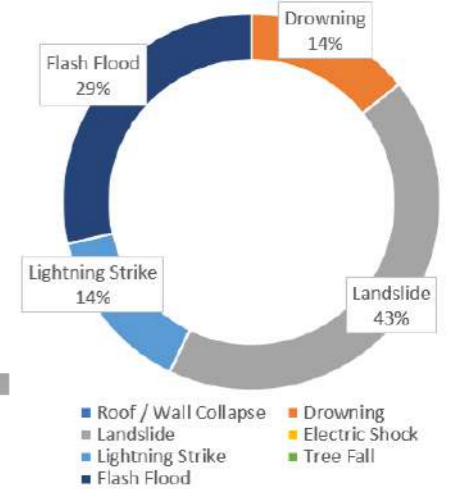
Cumulative Losses & Damages (25 June to Date)

- TOTAL: Deaths 168, Injured 254, Houses Damaged 1270

Legend: Deaths, Injured, Houses Damaged
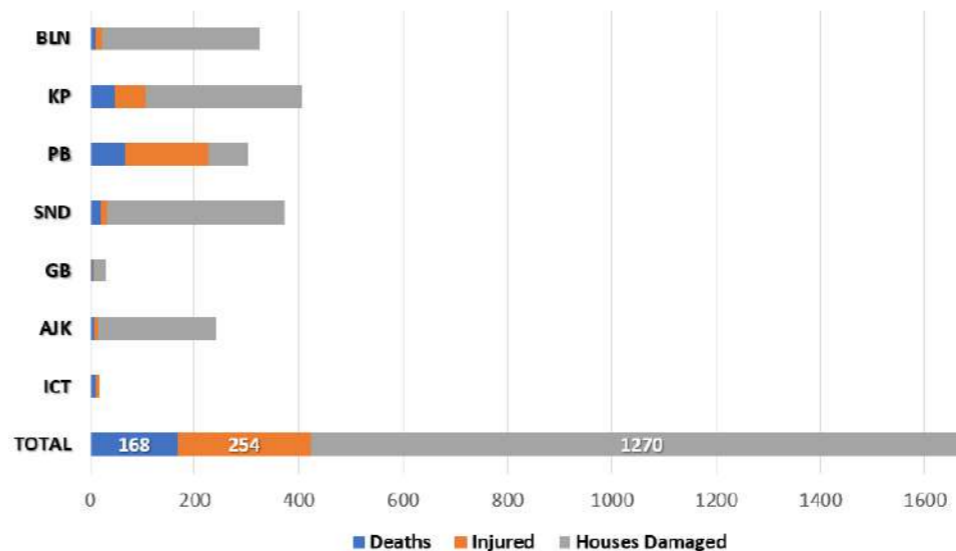
Cumulative Deaths Categorization

- Tree Fall 1%
- Lightning Strike 19%
- Flash Flood 4%
- Roof / Wall Collapse 46%
- Electric Shock 8%
- Drowning 9%
- Landslide 13%

Legend: Roof / Wall Collapse, Drowning, Landslide, Electric Shock, Lightning Strike, Tree Fall, Flash Flood
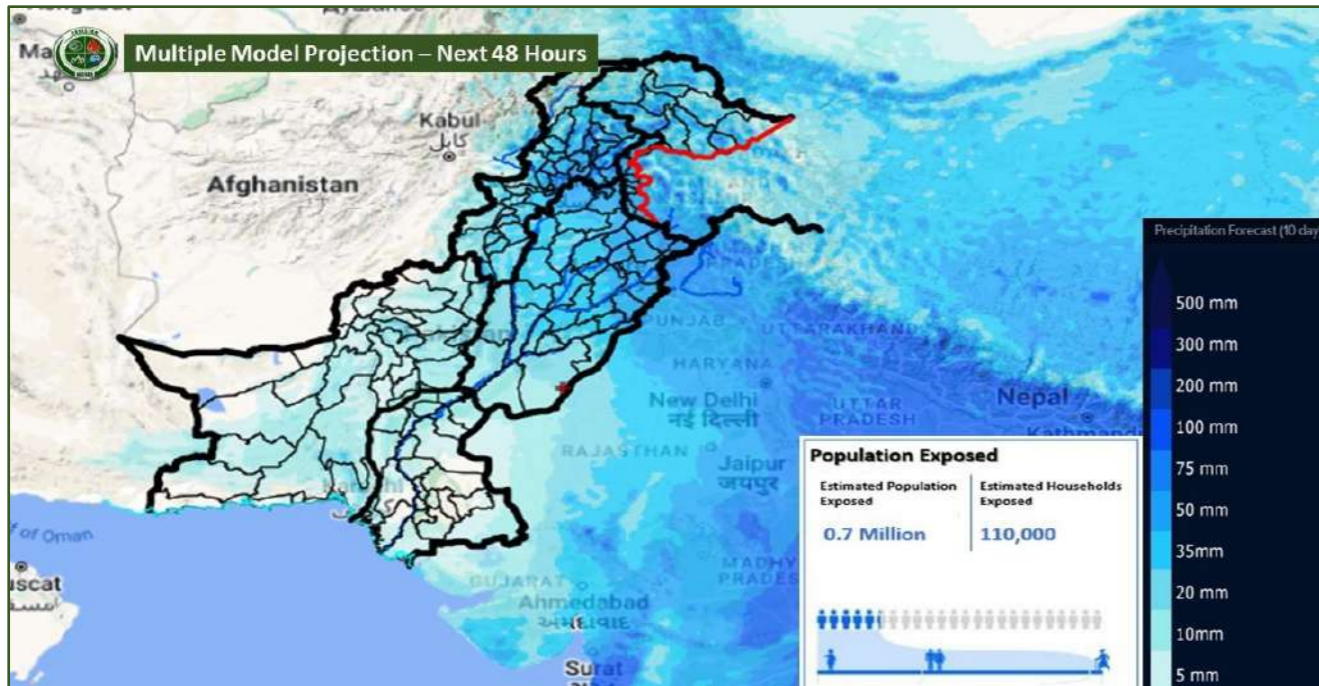
TOP RAINFALL RECORDED LAST 24 HOURS (MM)

- **Balochistan**. Muslim Bagh 11, Dalbandin 10, Turbat 6, Panjgur 5, Loralai 2, Quetta 1, Lasbela 1.

- **KP**. Kakul 87, Pasht Bajaur 48, Buner 45, Malam Jabba 39, Cherat 6, Saidu Sharif 6, Balakot 5, Dir, 3, Pattan 2, Bacha Khan 1.

- **Punjab**. Lahore 185, Sialkot 95, Sahiwal 86, Khanewal 55, Okara 37, Hafizabad 29, Nurpur Thal 24, Gujranwala 22, Rawalpindi 14, Bahawalnagar 14, Bhakkar 12, Gujrat 12, Bahawalpur 10, Murree 10, Jhelum 9, Chakwal 7, Joharabad 6, Jhelum 2, Mangla 2, Narowal 2, Faisalabad 2, Multan 1, Sargodha 1, Toba Tek Singh 1.

- **Sindh**. Badin 3, Thatta 2, Sakrand 1.

- **GB**. Bagrote 1.

- **AJK**. Barnala 46, Kotli 19, Muzaffarabad 18, Rawalakot 17, Garhi Dupatta 15, Haraman 11, Dhulli 1.

- **ICT**. Saidpur 109, Zero Point 86, Bokra 56, Golra 8, Airport 5.

Note: Losses / Damages figures are provided by PDMAs / GBDMA / SDMA / Govt Depts and are preliminary.

Multiple Model Projection – Next 48 Hours

Precipitation Forecast (10 day)
- 500 mm
- 300 mm
- 200 mm
- 100 mm
- 75 mm
- 50 mm
- 35mm
- 20 mm
- 10mm
- 5 mm

Population Exposed

Estimated Population Exposed	Estimated Households Exposed
0.7 Million	110,000

FFD Discharge Report
Recorded at: 27-Jul-2023 18:00 PST

River	Site	Inflow		Outflow	
Indus	Tarbela	260,000	⌄	254,400	LOW
	Kalabagh	292,388	⌄	284,388	LOW
	Chashma	338,279	⌄	334,279	LOW
	Taunsa	439,908	→	439,908	MEDIUM
	Guddu	368,216	↗	357,976	MEDIUM
	Sukkur	291,060	↗	266,660	LOW
	Kotri	120,157	↗	86,932	NORMAL
Kabul	Nowshera	58,500	↗	58,500	NORMAL
Jhelum	Mangla	65,000	⌄	10,000	NORMAL
	Rasul	2,450	⌄	0	NORMAL
Chenab	Marala	121,652	↗	104,652	LOW
	Khanki	80,336	↗	73,160	NORMAL
	Q.Abad	76,821	→	66,821	NORMAL
	Trimmu	91,672	⌄	83,272	NORMAL
	Panjnad	106,430	↗	97,230	NORMAL
Ravi	Jassar	40,440	→	40,440	NORMAL
	Shahdara	32,138	→	32,138	NORMAL
	Balloki	59,080	⌄	44,780	LOW
	Sidhnai	40,597	↗	32,547	LOW
	GS Wala	64,780	→	64,780	LOW
Sutlej	Sulemanki	84,430	→	84,430	MEDIUM
	Islam	37,984	→	37,984	NORMAL

RESERVOIR LEVELS		
Dams	**Tarbela**	**Mangla**
MCL (Feet)	1550.0	1242.0
MOL (Feet)	1402.0	1050.0
Water Level (Feet)	1532.10	1220.25
Live Storage — Max.	5.809	7.356
Live Storage — Present	4.789	5.843
% Filled	82.44	79.43

FORECASTED IMPACT NEXT 48-72 HOURS

- **Flash Flooding of Moderate to Heavy intensity** is expected in **Tributaries of River Kabul** and **Hill Torrents of D.G Khan Division** from **27 - 30 July**.
- **Rain-Wind-Thundershowers with scattered heavy falls**
  - **Khyber Pakhtunkhwa** (Galliyat, Chitral, Dir, Swat, Shangla, Buner, Mansehra, Kohistan, Abbottabad, Haripur, Peshawar, Mardan, Swabi, Nowshera, Kurram, Lakki Marwat, Kohat, Dera Ismail Khan, Bannu, Karak and Waziristan).
  - **Punjab** (Murree, Rawalpindi, Attock, Chakwal, Jhelum, Mandi Bahauddin, Sialkot, Narowal, Lahore, Sheikhupura, Hafizabad, Gujranwala, Gujrat, Kasur, Mianwali, Sargodha, Khushab, Faisalabad, Toba Tek Singh, Jhang, Bhakkar, Sahiwal, Bahawalnagar and Okara).
  - **Gilgit Baltistan** (Diamer, Astore, Ghizer, Skardu, Hunza, Gilgit, Ghanche and Shigar).
  - **State of AJ&K** (Neelum, Muzaffarabad, Poonch, Hattian, Bagh, Haveli, Sudhnoti, Kotli, Bhimber and Mirpur).
  - **Islamabad Capital Territory.**
- **Rain-Wind-Thundershowers with few heavy falls**
  - **Balochistan** (Kalat, Khuzdar, Lasbela, Awaran, Kech, Gwadar, Panjgur, Mastung, Sibbi, Naseerabad, Zhob, Sherani, Barkhan, Musakhel, Kohlu, Jhal Magsi and Loralai).
  - **Punjab** (Dera Ghazi khan, Rajanpur, Multan, Khanewal, Layyah, Kot Addu, Bahawalpur and Rahim Yar Khan).
- **Urban flooding** in municipal areas (*as indicated above*). **Flash flooding and landsliding** in hilly / mountainous regions of **Balochistan, KP, Punjab, GB & AJK** (*as indicated above*). **Hill Torrents** of **DG Khan, Rajanpur, Barkhan and Dera Bugti** to **remain active with Moderate intensity**.
- Flows in rivers and streams of Gilgit Baltistan **likely to increase and high probability / risk of GLOF incident** in vulnerable mountain valleys.

GUIDANCE ISSUED

- **City / District Administrations** are to **ensure contingency traffic plans** for areas vulnerable to flooding in urban centres, (*as indicated above*) catering for **prompt de-watering operations in flooded areas**.
- **PDMAs** to undertake **regular public awareness on all media channels / social media** to maximise general public's **knowledge on risks associated with monsoon season**; heavy rains, urban flooding, flash flooding, landslides, etc.
- **PDMAs** to ensure **early warning & prompt response** in **vulnerable areas** in light of wind-thundershowers and possibility of heavy falls (*in areas indicated above*), increased river flows and flash flooding.
- **PDMA Balochistan & Punjab** to ensure **early warning, prompt evacuation and response** in **vulnerable low-lying areas** adjacent to **nullahs / hill torrents** (*in areas indicted above*).
- **GBDMA** to ensure all necessary measures are undertaken to mitigate / prepare against **GLOF** incidents.
- **NHA / FWO / Local C&W Depts** to **ensure pre-placement of machinery** and **timely restoration of damaged road linkages**.
- **Rescue Services, Armed Forces** and leading **NGOs / CSOs** to **ensure availability of personnel / equipment** in the indicated areas & **be on stand-by for rapid response**.