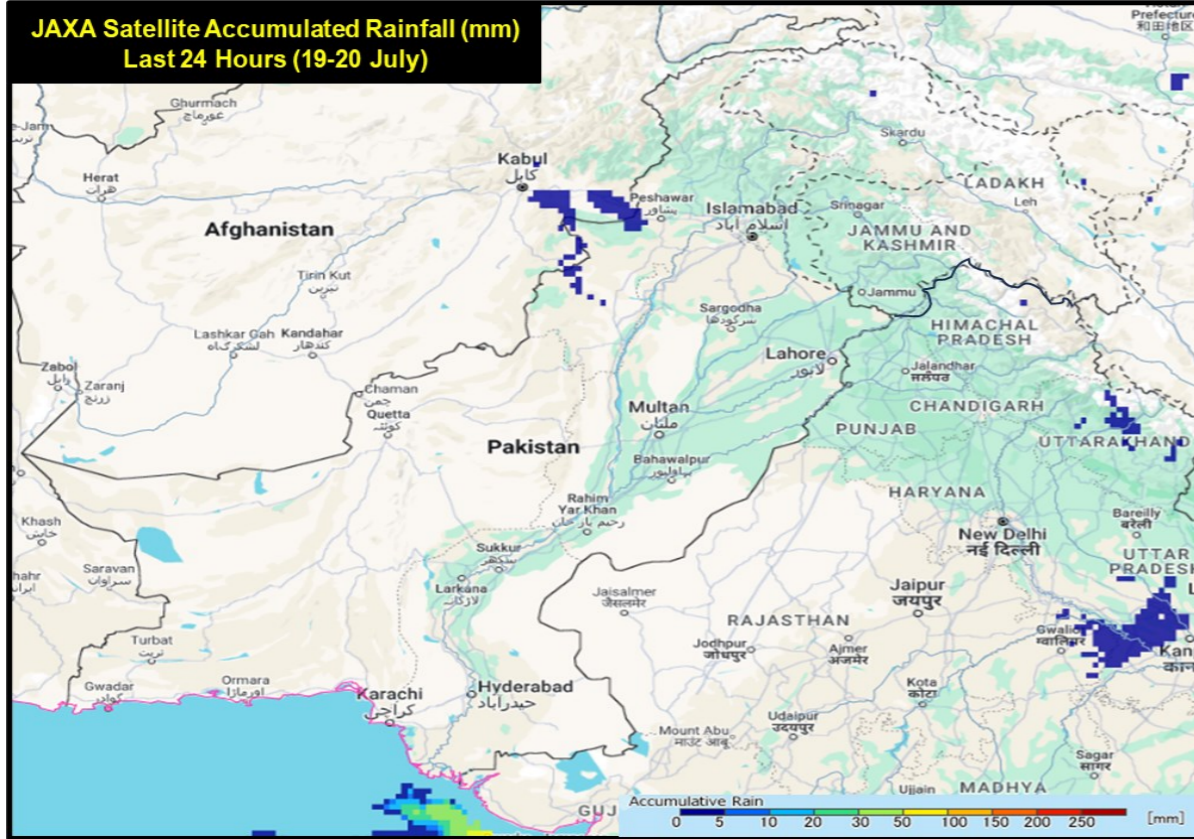




# NDMA MONSOON 2024 UPDATE NO. 020 (20 JUL - 1330 HRS)



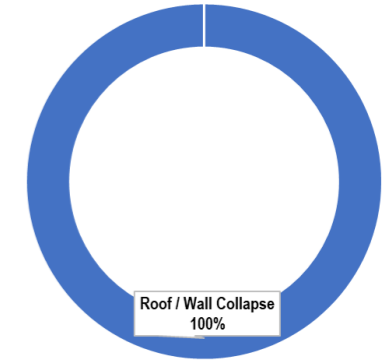
## JAXA Satellite Accumulated Rainfall (mm) Last 24 Hours (19-20 July)



## Losses & Damages Last 24 Hours



## Last 24 Hrs Deaths Categorization



- Roof / Wall Collapse
- Drowning
- Landslide
- Electric Shock
- Lightning Strike
- Tree Fall
- Flash Flood

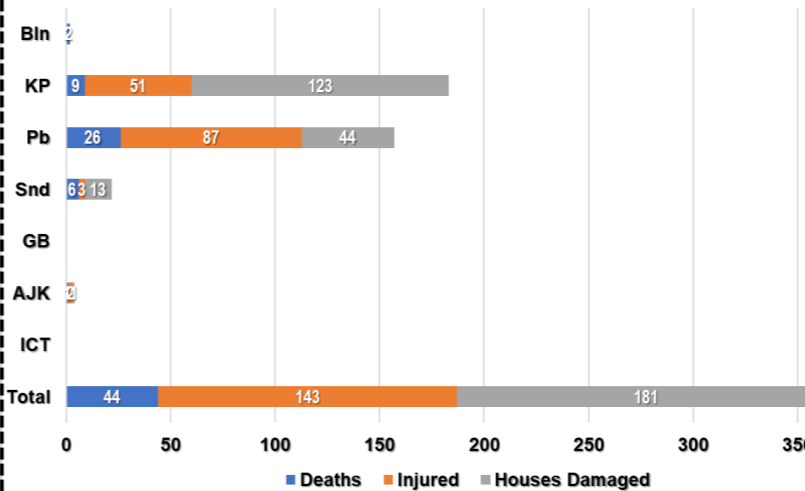
NTR

## TOP RAINFALL RECORDED LAST 24 HOURS (MM)

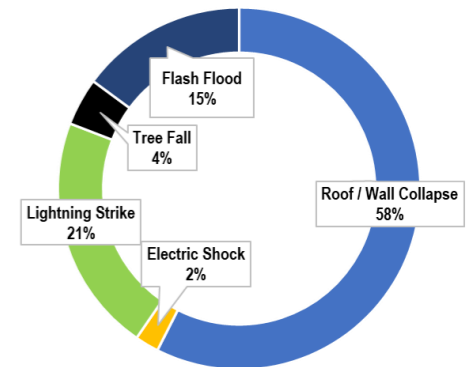
- Balochistan.** Sibbi 35, Barkhan 2
- Khyber Pakhtunkhwa.** Dir 10, Mirkhani 8, Kalam 1, Drosh 1, Balakot 1
- Punjab.** Multan 69, Mianwali 37, Khanewal 22, Kasur 7, Okara 7, Multan 7, T.T. Singh 4, Shorkot 4, Faisalabad 4, Muzaffargarh 3, Sahiwal 2
- Sindh.** Karachi 16, Badin 14
- Gilgit-Baltistan.** Nil
- State of AJ&K.** Bandi Abbaspur 10
- ICT.** Nil

Data Source: PMD / FFD

## Cumulative Losses & Damages (1-20 Jul)



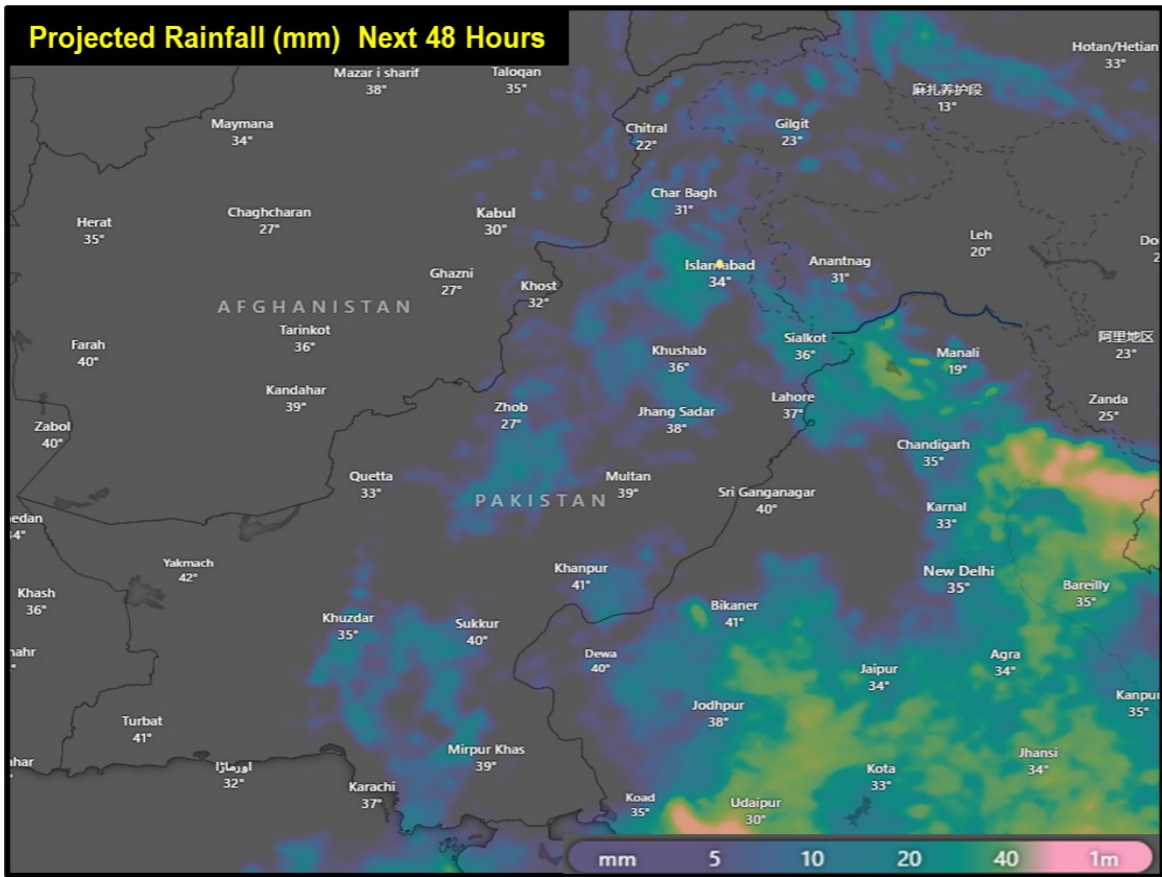
## Cumulative Deaths Categorization



- Roof / Wall Collapse
- Drowning
- Landslide
- Electric Shock
- Lightning Strike
- Tree Fall
- Flash Flood

Note: Losses / Damages data is provided by PDMA's / GBDMA / SDMA / Govt Depts and is preliminary.

## Projected Rainfall (mm) Next 48 Hours



## Forecasted Impact Next 24-48 Hours

- Balochistan.** Rain-wind / thundershowers with heavy falls at isolated places expected in Lasbela, Awaran, Bela, Khuzdar, Panjgur, Kech, Kharan, Ormara, Zhob, Barkhan, Musa Khel, Sherani, Kohlu, Harnai, Sibbi, Loralai, Naseerabad, Jhal Magsi and Jaffarabad.
- Khyber Pakhtunkhwa.** Rain-wind / thundershowers expected in Dir, Chitral, Swat, Kohistan, Malakand, Bajaur, Shangla, Battagram, Buner, Kohat, Bajaur, Mohmand, Khyber, Mansehra, Abbottabad, Galiyat, Haripur, Peshawar, Mardan, Charsadda, Hangu, Kurram, Waziristan, Bannu and Dera Ismail Khan up to 21st July with occasional gaps.
- Punjab.** Rain-windstorm / thundershowers expected at isolated places in Murree, Sialkot, Narowal, Gujrat, Gujranwala, Lahore, Kasur, Sheikhupura, Nankana Sahib, Pakpattan, Faisalabad, Layyah, Bahawalpur, Bahawalnagar, Dera Ghazi Khan, Rajanpur, Multan, Rahim Yar Khan, Khanewal, Muzaffargarh and Kot Addu.
- Sindh.** Rain-wind / thundershowers with heavy falls in isolated places expected in Dadu, Jamshoro, Qambar Shahdadkot, Sh. Benazirabad, Sukkur, Kashmore, Khairpur, Larkana, Badin, Thatta, Sujawal, Karachi, Jacobabad, Shikarpur, Hyderabad, Tharparkar, Umarkot, Mirpurkhas and Sanghar.
- Islamabad Capital Territory.** Hot and humid weather is expected.
- Gilgit Baltistan.** Partly cloudy weather is expected.
- AJ&K.** Rain-wind / thundershowers expected in Neelum Valley, Muzaffarabad, Rawalakot, Poonch, Hattian, Bagh, Haveli, Sudhnoti, Kotli, Bhimber, Mirpur from up to 21st July with occasional gaps.
- Flash flooding and land sliding** in hilly / mountainous regions of Balochistan, KP, GB and AJ&K
- Heavy falls** may cause urban flooding in Peshawar, Lahore, Islamabad, Rawalpindi, Faisalabad, Sialkot, Narowal, Gujranwala and other areas.
- Heavy Falls** may increase flows in local nullahs, streams of Balochistan, KP, Punjab and AJ&K.
- Heavy Rains-windstorms / lightning** may cause roof/wall collapse of kacha houses, electric poles, billboards and solar panels.
- Higher Temperatures & Rains** may trigger GLOF Incidents in vulnerable valleys of KP and GB

## Guidance Issued

- PDMA's to ensure early warning & prompt response in vulnerable areas in light of forecasted conditions
- PDMA's 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.
- City / District Administrations are to ensure contingency plans for areas vulnerable to flooding in urban centres, catering for prompt de-watering operations in flooded areas.
- 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.
- Ensure that public avoid crossing nullahs and keep livestock away during adverse weather conditions.
- Ensure that public Does Not Venture Outside during Thunderstorms and Do Not Seek Shelter Under Trees to avoid risk of lightning strike.
- Ensure that public undertakes adequate measures to maintain their homes from adverse effects of heavy rainfall in order to avoid roof / wall collapses.
- Additional guidance is available on NDMA Website and "Pak NDMA Alert" app available on Google Play Store and iOS App Store.

Pakistan Reservoirs Data (20 Jul - 0600 hours)		
Details	Tarbela Dam	Mangla Dam
MCL (Feet)	1,550.00	1,242.00
Dead Level (Feet)	1,402.00	1,050.00
Water Level (Feet)	1,517.69	1,196.70
Change Last 24 hrs (Feet)	-1.01	+0.25
Storage (MAF)	Max	7.356
	Present	4.052
Change Last 24 hrs	-0.005	+0.015
% Dam Filled	70.00	55.68
% Change Last 24 hrs	0.00	+0.2

Indian Dams Data (19 Jul - 0600 hours)			
Details	Bhakra	Pong	Thein
MCL (Feet)	1,680.00	1,390.00	1,732.00
Water Level (Feet)	1,597.45	1,313.55	1,635.58
Change (Feet)	+0.62	-1.84	-10.76
Storage (MAF)	Max	4.991	1.900
	Present	1.861	0.460
Change	+0.15	-0.062	-0.123
% Dam Filled	37	23	24
% Change	0	-1	-7
2023 Position (%)	64	75	85

FFD Discharge Report				
Recorded at: 20-Jul-2024 12:00 PST				
River	Site	Inflow	Outflow	
Indus	Tarbela	175,000	164,300	NORMAL
	Kalabagh	216,868	208,878	NORMAL
	Chashma	246,372	235,072	NORMAL
	Taunsa	224,088	204,088	NORMAL
	Guddu	175,079	136,504	NORMAL
	Sukkur	125,525	74,630	NORMAL
Kabul	Kotri	78,485	38,920	NORMAL
	Nowshera	53,500	53,500	NORMAL
Jhelum	Mangla	25,000	15,000	NORMAL
	Rasul	10,465	0	NORMAL
Chenab	Marala	55,371	27,571	NORMAL
	Khanki	32,849	25,150	NORMAL
	Q.Abad	41,855	23,855	NORMAL
	Trimmu	18,510	5,368	NORMAL
	Panjnad	18,955	5,095	NORMAL
Ravi	Jassar	11,081	11,081	NORMAL
	Shahdara	16,168	16,168	NORMAL
	Balloki	27,470	2,970	NORMAL
Sutlej	Sidhna	13,000	0	NORMAL
	GS Wala	1,014	1,014	NORMAL
	Sulemanki	13,526	2,502	NORMAL
	Islam	3,727	1,777	NORMAL