



**Government of India
Earth System Science Organization
Ministry of Earth Sciences
India Meteorological Department**

Press: Dated: 21 July, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(21 July-3 August 2022)**

1. Salient Observed Features for week ending on 20 July 2022

- Monsoon trough sifted 1st time in the month, to near of its normal position in the last date of the week i.e. on 20th and today, it was seen through Ganganagar, Rohtak, Hardoi, Dehri, Jamshedpur, Balasore and thence east-southeastwards to Northeast Bay of Bengal. All earlier dates, since its coverage of entire country on 2 July, it remained south of its normal position. There was significant reduction in rainfall activities over Gujarat and west coast from 18th July and over parts of Peninsular and Central India from 20th July onwards. As results States like Punjab, Haryana, Delhi, Uttar Pradesh and Bihar in Northern plains also have received higher rains towards end of the week since 20 July.
- Rainfall during the week over Northeast India rainfall continue to remain less and it received deficient rainfall 3rd week consecutively and it was due to continued absence of any winds and moisture support from Bay of Bengal to that region.
- **Analysis of Weekly overall Rainfall distribution during the current week ending on 20 July 2022 and Monsoon Season's Rainfall Scenario (01 June-20 July, 2022) shows rainfall status have further improved:** It shows for the country as a whole, the weekly cumulative All India Rainfall departure till week ending on 20 July 2022, from its long period average (LPA) was +11 %, with **over east and northeast India as -53%** while all India Seasonal cumulative rainfall %departure during this year's **monsoon Season Rainfall during 01 June till 20 July 2022 is +11% i.e. excess.** Details of the rainfall distribution over the four broad geographical regions of India are given in **Table 1** and Meteorological sub-division-wise rainfall both for week and season are given in Annex I and II respectively.

Table 1: Rainfall status (Week and season)

Region	WEEK			SEASON		
	14.07.2022 TO 20.07.2022			01.06.2022 TO 20.07.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	45.9	97.5	-53%	525.7	610.7	-14%
NORTH-WEST INDIA	48.4	52	-7%	187.4	206	-9%
CENTRAL INDIA	115.2	75.4	+53%	481.9	369.5	+30%
SOUTH PENINSULA	63.6	48.2	+32%	389.2	290	+34%
Country as a whole	73.5	66.4	+11%	380.1	342.1	+11%

2. Large scale features

- Currently, the sea surface temperatures (SSTs) as well as the atmospheric conditions over Equatorial Pacific Ocean indicate La Niña conditions. The latest forecasts from MMCFS and other global models indicate that La Niña conditions are likely to continue during remaining part of the monsoon season. In addition to ENSO conditions over Pacific, other factors such as the Indian Ocean Sea Surface Temperatures (SSTs) also have some influence on Indian monsoon. Currently, the SST conditions over Equatorial Indian Ocean are very close to the threshold level for negative Indian Ocean Dipole (IOD) conditions. The latest forecasts from MMCFS and other global models indicate negative IOD conditions are likely to develop during remaining part of the monsoon season.
- The Madden Julian Oscillation Index (MJO) currently lies in phase 1 with amplitude more than 1. It would continue in same phase during first half of week 1 with amplitude remaining more than 1. Thereafter, it would move across phases 2 & 3 during remaining part of the forecast period with amplitude remaining less than 1. Hence, MJO phase will support enhancement of convective activity over the Bay of Bengal (BoB) and the Arabian Sea (AS) from later part of week 1.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (21 to 27 July, 2022) and Week 2 (28 July to 03 August, 2022)

Forecast for week 1 (21 to 27 July, 2022):

- The monsoon trough at mean sea level is near its normal position. It is very likely to remain so during next 2 days and shift gradually southwards thereafter.
- A Western Disturbance as a cyclonic circulation lies over Himachal Pradesh & neighbourhood and another fresh Western Disturbance as a cyclonic circulation lies over east Afghanistan & neighbourhood at middle tropospheric levels.
- A cyclonic circulation lies over Jharkhand & neighbourhood in lower & middle tropospheric levels tilting southwards with height.
- A north-south trough runs from South Interior Karnataka to Comorin area in lower tropospheric levels.
- A cyclonic circulation lies over Haryana & neighbourhood in lower tropospheric levels.
- **Under the influence of above systems;**
- Fairly widespread to widespread light/moderate rainfall with **isolated heavy falls and thunderstorm/lightning** very likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, and Rajasthan during the week; and over Punjab during 21st-23rd, 26th & 27th; Haryana-Chandigarh 21st-22nd, 26th & 27th and West Uttar Pradesh during 21st-22nd and over East Uttar Pradesh on 21st July, 2022.
 - ✓ **Isolated very heavy rainfall very likely over Rajasthan during 21st-23rd; Jammu & Kashmir on 21st & 22nd; Himachal Pradesh, Punjab and Haryana-Chandigarh on 21st July, 2022.**
- Fairly widespread/widespread light/moderate rainfall & **thunderstorm/lightning** very likely over Chhattisgarh, Vidarbha, Madhya Pradesh during the week.
 - ✓ **Isolated heavy rainfall** very likely over Chhattisgarh during 22nd-27th; Vidarbha during 23rd-27th and over Madhya Pradesh during 21st-27th July, 2022.
- Fairly widespread/ widespread rainfall very likely over Odisha, Bihar, Jharkhand and West Bengal & Sikkim during the week.
 - ✓ **Isolated heavy rainfall** very likely over Odisha on 21st & 25th & 27th; Bihar and Sub-Himalayan West Bengal & Sikkim on 21st & 22nd and Jharkhand on 21st July, 2022.
 - ✓ **Isolated very heavy rainfall also likely over Odisha during 22nd-24th July, 2022.**
- Fairly widespread/widespread light/moderate rainfall with **heavy falls** very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during the week.
 - ✓ **Isolated very heavy falls very likely over Assam & Meghalaya on 21st & 22nd and over Arunachal Pradesh during 21st-23rd July, 2022.**

- Fairly widespread/ widespread rainfall with **isolated heavy falls**, thunderstorm & lightning very likely over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe during 21st-22nd and over Gujarat region on 22nd to 26th; Saurashtra & Kutch on 25th; Konkan & Goa and ghat areas of Madhya Maharashtra on 23rd & 24th July, 2022.
- ✓ **Isolated very heavy falls very likely over Gujarat State on 23rd & 24th July, 2022. Isolated extremely heavy falls also likely over Saurashtra & Kutch on 24th July, 2022**
- Isolated to scattered rainfall with thunderstorm likely to occur over rest parts of the country during most days of the week.

Rainfall for week 2 (28 July to 03 August, 2022):

- **The monsoon trough is very likely to be north of its normal position during most days of the week.**
- Fairly widespread/ widespread rainfall with **isolated heavy falls** likely over West Bengal & Sikkim, Bihar, Jharkhand, Uttar Pradesh and extreme south Peninsular India during most days of the week.
- **Rainfall activity is likely to be above normal over north India including foothills of Himalayas and extreme south Peninsular India. It is likely to below normal over central parts of the country & adjoining north Peninsular India.**

4. Cyclogenesis forecast for North Indian Ocean during next 2 weeks

Refer:

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_ddb8de_Extended%20Range%20Outlook_21072022.pdf

Next weekly update will be issued on next Thursday i.e. 21 July 2022

Legends: Heavy Rain: 64.5 to 115.5 mm Very Heavy Rain: 115.6 to 204.4 mm, Extremely Heavy Rain > 204.4 mm

SPATIAL DISTRIBUTION (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75





