



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

Dated: 19th August, 2021

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(19 Aug-1 Sept 2021)**

1. Salient Features

- Last week's weak monsoon conditions continued to prevailed till 15 Aug over major parts of the country covering Northwest, Central and adjoining Peninsular and West coast of India. It was mainly due to location of the monsoon trough lying close to the foot hills of the Himalayas or north of its normal position, absence of easterly winds from Bay of Bengal over north India and weak pressure gradient and absence of off-shore trough along West coast of India.
- The monsoon activity revived from 16th Aug with the eastern end of the monsoon trough shifting southwards on 16th Aug in association with the formation of a low pressure area over Northwest and adjoining Westcentral Bay of Bengal off south Odisha-north Andhra Pradesh coasts.
- Till 19 Aug 2021, only 2 low pressure systems formed over Bay of Bengal (Previous one was on 5 Aug 2021) against normal of 4 systems for the month of the August.
- Strong southerly winds/southwesterly from Bay of Bengal continued to prevail over northeast India and Sub-Himalayan West Bengal & Sikkim during most days of the week causing isolated heavy to very heavy rainfalls over these areas during the week.
- **Weekly cumulative rainfall** for the country as a whole for the week ending on 18th Aug is 36% below its Long Period Average (LPA), while the Seasonal cumulative rainfall during 1st June to 18th Aug, 2021 is 9 % below the LPA. Details of the rainfall distribution over the four broad geographical regions of India are given Table 1 with met sub-division-wise rainfall both for week and season given in Annex I and II.

➤ **Forecast for next 2 weeks based on NWP model consensus:**

a) **Forecast of formation of monsoon Low**

Based upon NWP Model consensus, formation of a Low Pressure Area is likely over northwest & adjoining westcentral BoB off north Andhra Pradesh – south Odisha coasts during the first half of Week 2.

b) **Rainfall Forecast of Week 1 (19-25 Aug, 2021)**

Overall rainfall activity during week 1, is very likely to be near normal.

c) **Week 2 (26 Aug-1 Sept 2021)**

- There is likely decrease in rainfall activity over northwest India as compare to week 1.
- Overall normal to above normal rainfall activity likely over south Peninsular & adjoining central India; near normal rainfall activity likely over most parts of east & northeast India and below normal rainfall activity likely over most parts of northwest India. **As such, the rainfall for the country as a whole is likely to be normal.**

2. Large scale features as on 18th August, 2021

- Presently, neutral ENSO conditions are seen over the equatorial Pacific. The latest global model forecasts indicate that the current neutral ENSO conditions are likely to continue during the month over the equatorial Pacific Ocean. However, sea surface temperatures over central and east equatorial Pacific Ocean is showing cooling tendency and there is an increased possibility of re-emergence of the La Nina condition in the end of the monsoon season or thereafter.
- At present, negative Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The latest forecast from the MMCFS and other global models together indicate negative IOD conditions over the Indian Ocean are likely to continue **during remaining part of the monsoon** season.
- The Madden Julian Oscillation (MJO) Index currently lies in Phase 2 with amplitude more than 1. It will continue in same phase during first half of week 1 with amplitude becoming less than 1. Thereafter, it is likely to move to Phase 1 across phases 3 & 2 during later part of Week 1 with amplitude remaining less than 1. It will continue in phase 1 during first

half of week 2. Thereafter, it will move to phase 2 during later part of Week 2 with amplitude remaining less than 1. Hence the phase of MJO would be favorable for enhancement of convective activity over the North Indian Ocean (NIO) during first half of Week 1 and second half of week 2

Table 1: Rainfall status (Week and season)

Region	WEEK			SEASON		
	12.08.2021 TO 18.08.2021			01.06.2021 TO 18.08.2021		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	87.0	84.2	3%	872.7	982.7	-11%
NORTH-WEST INDIA	15.1	49.8	-70%	372.6	415.8	-10%
CENTRAL INDIA	39.9	70.1	-43%	606.0	684.6	-11%
SOUTH PENINSULA	38.6	45.5	-15%	517.5	494.4	5%
country as a whole	39.5	61.3	-36%	559.3	612.1	-9%

3. Forecast for next two week

Rainfall for week 1: (19 to 25 August, 2021)

- The western end of monsoon trough lies near its normal position and the eastern end lies to be south of its normal position. The eastern end of monsoon trough is very likely to shift gradually northwards towards foothills of Himalayas during next 2 days.
- A cyclonic circulation lies over south Bihar & neighbourhood at lower tropospheric levels. It is likely to move nearly westwards during next 3 days.
- Strong southerly winds from Bay of Bengal to northeast India will continue to prevail till today, the 19th August, 2021.
- **Due to above meteorological conditions:**
- ✓ **Gradual increased in rainfall activity over Northwest India and Bihar:**

Fairly widespread to widespread rainfall with **isolated heavy falls** very likely over Bihar, East Uttar Pradesh and Uttarakhand from 19th to 25th August, 2021. . **Isolated heavy to very heavy** is also very likely over Uttarakhand on 19th & 20th and over East Uttar Pradesh on 19th August, 2021.

Scattered to fairly widespread rainfall is very likely over West Uttar Pradesh, Himachal Pradesh, Haryana & Chandigarh and East Rajasthan during 20th to 23rd August with isolated **heavy rainfalls** over above areas on 20th & 21st August, 2021.

- ✓ **Enhanced rainfall activity over Central & adjoining north Peninsular India during next 2 days:** Fairly widespread to widespread rainfall activity with **isolated heavy falls** is very likely over Gujarat region, Konkan & Goa, Madhya Maharashtra and Madhya Pradesh during 19th to 21st August; over Marathawada, Coastal Andhra Pradesh, Telangana, Chhattisgarh, Jharkhand and Gangetic West Bengal on today the 19th August, 2021. Rainfall activity is very likely to decrease thereafter over above areas.
- ✓ **Continuation of rainfall activity over Northeast India:** Fairly widespread to widespread rainfall activity with isolated **heavy to very heavy falls** very likely to continue over Northeast India and Sub-Himalayan West Bengal & Sikkim on today, the 19th August and decrease in intensity thereafter for subsequent 2 days. It is likely to increase with **isolated heavy rainfall** over the above regions from 22nd August, 2021.
- ✓ Rainfall activity is very likely to increase with fairly widespread rainfall **with isolated heavy falls** over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and South Interior Karnataka during 21st to 23rd August, 2021. Light/moderate isolated to scattered rainfall likely over rest parts of Peninsular India.
- **Overall rainfall activity is very likely to be near normal.**

Rainfall for week 2: (26 August to 01 September, 2021)

- The monsoon trough is very likely to be near normal position during most days of the week.
- There is likely decrease in rainfall activity over northwest India as compare to week 1.
- Fairly widespread to widespread rainfall activity with isolated heavy falls very likely along west coast and most parts of north Peninsular & adjoining central India during most of the days.
- Light/moderate scattered to fairly widespread rainfall likely over rest parts of country

except northwest India.

- Overall, normal to above normal rainfall activity likely over south Peninsular & adjoining central India; near normal rainfall activity likely over most parts of east & northeast India and below normal rainfall activity likely over most parts of northwest India .

Next weekly update will be issued on next Thursday i.e. 26th August 2021

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 Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)

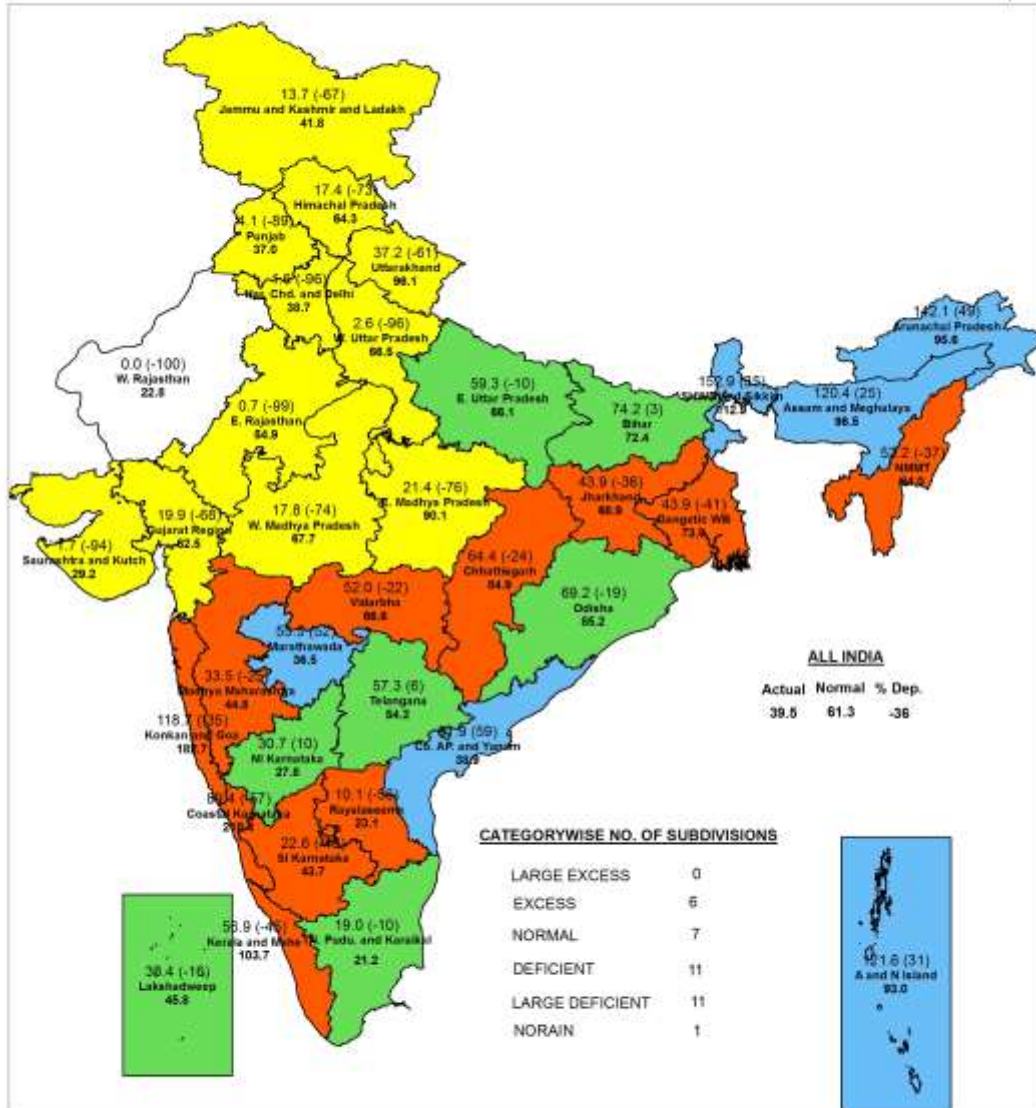
Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

Annex I



SUBDIVISION RAINFALL MAP

Week : 12-08-2021 To 18-08-2021



Legend

Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-49% to -20%] Large Deficient [-99% to -60%] No Rain [-100%] No Data

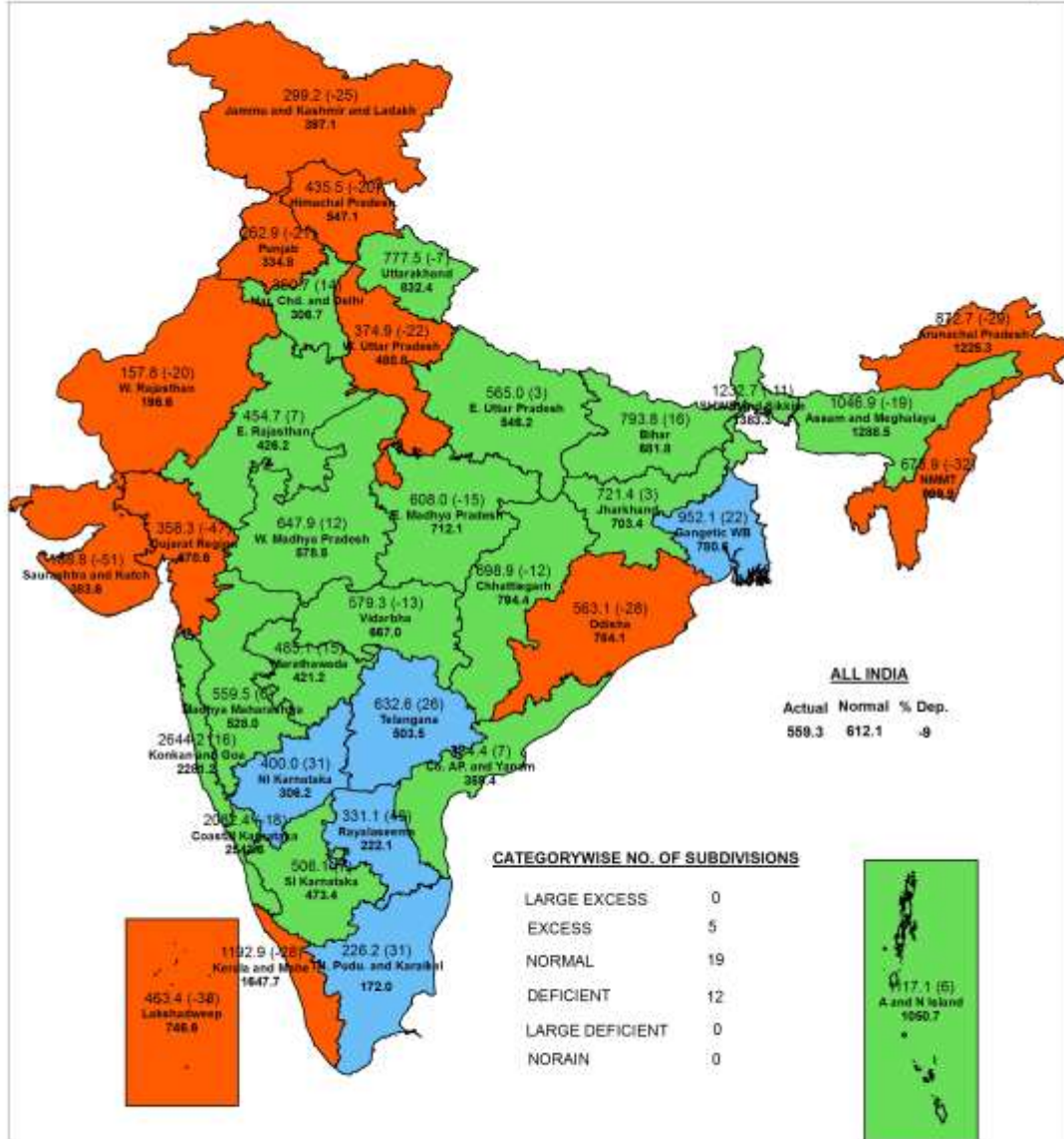
NOTES :

- a) Rainfall figures are based on operation data.
- b) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm).
- c) Percentage Departures of rainfall are shown in brackets.



SUBDIVISION RAINFALL MAP

Period : 01-06-2021 To 18-08-2021



Legend

Large Excess [80% or more] Excess [25% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-99% to -60%] No Rain [-100%] No Data

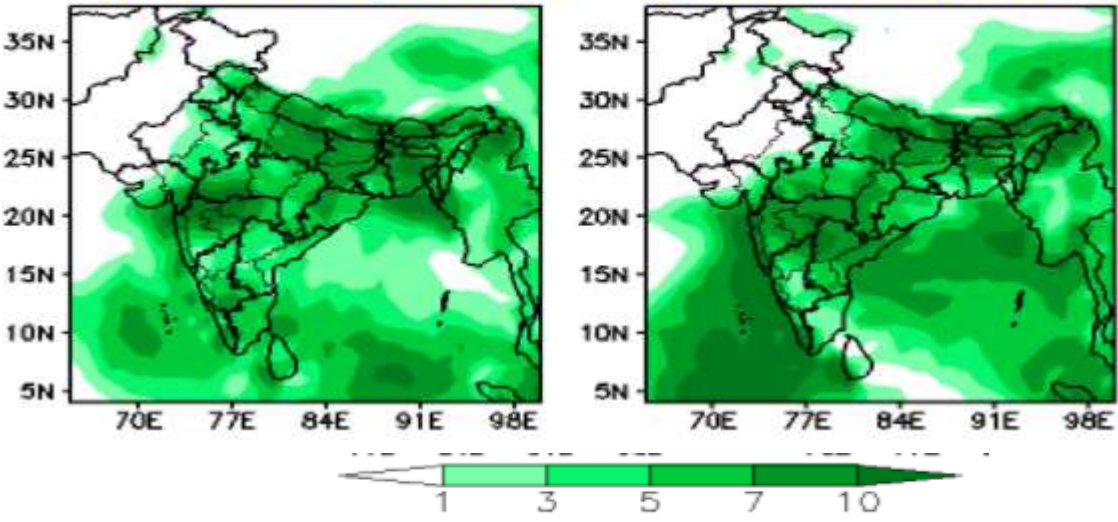
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- b) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm).
- c) Percentage Departures of rainfall are shown in brackets.

Forecast Rainfall (mm/day)

(Week1: 20Aug-26Aug)

(Week2: 27Aug-02Sep)



Forecast Rainfall Anomaly (mm/day)

(Week1: 20Aug-26Aug)

(Week2: 27Aug-02Sep)

