



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

Press: Dated: 13 Oct, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(13-26 Oct 2022)**

1. Salient Observed Features for week ending on 12 Oct 2022

- **Heavy to very heavy spell at isolated places reported over Haryana, Delhi, West Madhya Pradesh and Uttarakhand with isolated extremely heavy rainfall over Uttar Pradesh and East Rajasthan during 7-11 Oct. It was mainly** due to cyclonic circulation lay northern parts of Madhya Maharashtra & neighbourhood in the evening of 7th Oct which then lay over Gujarat Region & neighbourhood on 8th with vertical extension upto mid-tropospheric levels and moved north-northeastwards and lay over northeast Rajasthan & neighbourhood on 9th, over south Haryana & neighbourhood on 10th, over Punjab & adjoining Haryana on 11th and over north Punjab & neighbourhood towards the end of the week. Movement of this system to northwest India, trough from Gujarat at lower levels to Haryana, through this system and then interaction with mid and upper level Western Disturbances during 7-11, had caused such extreme longer spells over parts of plains of Northwest India including over NCR Delhi during the period.
- **Analysis of Weekly overall Rainfall distribution during the current week ending on 12 Oct 2022 and Post monsoon Season's Rainfall Scenario (01-12 Oct):** It shows for the country as a whole, the weekly cumulative All India Rainfall departure till week ending on 12Oct, from its long period average (LPA) was +177%, with **over east and northeast India as +93%** while all India Seasonal cumulative rainfall % departure during this year's **monsoon Season Rainfall during 01 Oct-12Oct 2022** is +88%. 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		
	06.10.2022 TO 12.10.2022			01.10.2022 TO 12.10.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	76.6	39.7	+93%	112	71.6	+56%
NORTH-WEST INDIA	55.8	6.4	+772%	58	11.7	+396%
CENTRAL INDIA	51.8	17.2	+201%	65.6	33.8	+94%
SOUTH PENINSULA	59.3	35.2	+68%	81.4	65.3	+25%
Country as a whole	58.5	21.1	+177%	73.7	39.3	+88%

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 indicate that La Niña conditions are likely to continue during Oct-Nov 2022. 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 indicate negative IOD conditions are likely to in Oct-Nov 2022.
- The Madden Julian Oscillation Index (MJO) currently lies in phase 6 with amplitude more than 1 and would continue in same phase during the entire forecast period

3. Forecast for next two week

[Weather systems & associated Precipitation during Week 1 \(13 to 19 October, 2022\) and Week 2 \(20-26 October, 2022\)](#)

Withdrawal of Southwest Monsoon

- The withdrawal line of Southwest Monsoon now passes through Long. 79.0°E/ Lat. 31.7° N, Uttarkashi, Naziabad, Agra, Gwalior, Ratlam, Bharuch and Long. 71.0°E / Lat.

20.3° N (Annexure I).

- **Conditions are very likely to become favourable for withdrawal of southwest monsoon from some more parts of northwest & central India during next 2-3 days. It is likely to further withdraw from remaining parts of Gujarat state, some parts of Maharashtra and some parts of East India during subsequent 2 days.**

Forecast for week 1 (13 to 19 October, 2022):

- A cyclonic circulation lies over Comorin area & neighbourhood in lower tropospheric levels.
- A cyclonic circulation lies over central Bay of Bengal and neighbourhood in lower tropospheric levels. It is likely to move nearly westwards during next 2-3 days .
- Under the influence of above systems:
 - **Fairly widespread/widespread light/moderate rainfall with isolated heavy falls & thunderstorm/lightning very likely over Tamil Nadu, Puducherry & Karaikal, South Interior Karnataka and Kerala & Mahe during the week;** Coastal Andhra Pradesh on 13th, 14th, 18th & 19th and Coastal Karnataka on 17th to 19th; Odisha on 18th & 19th and over Chhattisgarh, Rayalaseema & North Interior Karnataka on 13th October, 2022. **Scattered to Fairly widespread light/moderate rainfall is very likely over rest days of the week.**
 - Scattered to Fairly widespread light/moderate rainfall very likely over Andaman & Nicobar Islands and Lakshadweep area during the week. **Isolated heavy falls** very likely over Andaman & Nicobar Islands during 2nd half of the week.
 - Scattered to Fairly widespread light/moderate rainfall very likely over northeast India during the week; over East India during 1st half of the week and decrease significantly thereafter. **Isolated heavy falls** & thunderstorm/lightning very likely over Arunachal Pradesh and Assam & Meghalaya on 13th October, 2022.
 - Dry weather very likely to prevail over most parts of Northwest India from today, the 13th October onwards.

Rainfall for week 2 (20 to 26 October, 2022):

- **Conditions are very likely to become favourable for withdrawal of southwest monsoon from some more parts Central & East India.**
- **A fresh cyclonic circulation likely to develop over north Andaman Sea during 1st half of the week and move nearly westwards towards Andhra Pradesh Coast. As a result,**

scattered to fairly widespread rainfall & **isolated heavy falls likely** over south Peninsular India during most days of the week.

- **Overall, rainfall activity is likely to be normal to above normal over south Peninsular India; near normal over central and east & northeast India; below normal over northwest India.**

Likely formation of LPS over Bay of Bengal : i) There is likelihood of formation of a cyclonic circulation over north Andaman Sea and neighbourhood around 17th/18th with west-northwestwards movement and further intensification into a low pressure area by 20th October over southeast and adjoining central parts of Bay of Bengal. Further, there is moderate probability that the low pressure area would move west-northwestwards and concentrate into a depression over westcentral Bay of Bengal during beginning of the week 2. (ii) there is also likelihood of formation of a cyclonic circulation over eastcentral and adjoining southeast Arabian Sea around 17th/18th with intensification upto a low pressure area and southeastwards movement. Refer for details:

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_9e2365_Extended%20Range%20Outlook_13102022.pdf

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

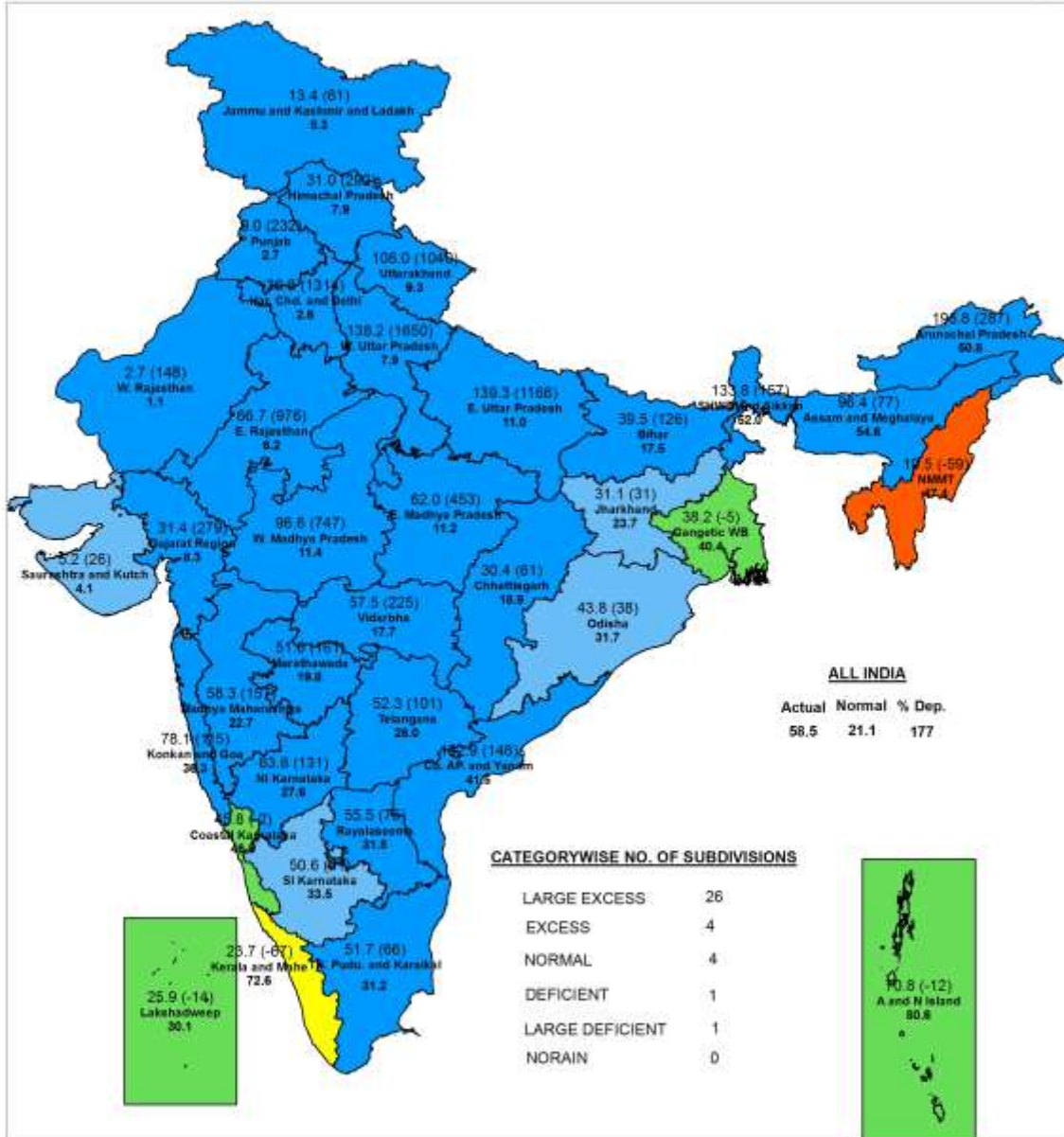
SPATIAL DISTRIBUTION (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

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



SUBDIVISION RAINFALL MAP

Week : 06-10-2022 To 12-10-2022



ALL INDIA

Actual	Normal	% Dep.
58.5	21.1	177

CATEGORYWISE NO. OF SUBDIVISIONS

LARGE EXCESS	26
EXCESS	4
NORMAL	4
DEFICIENT	1
LARGE DEFICIENT	1
NORAIN	0

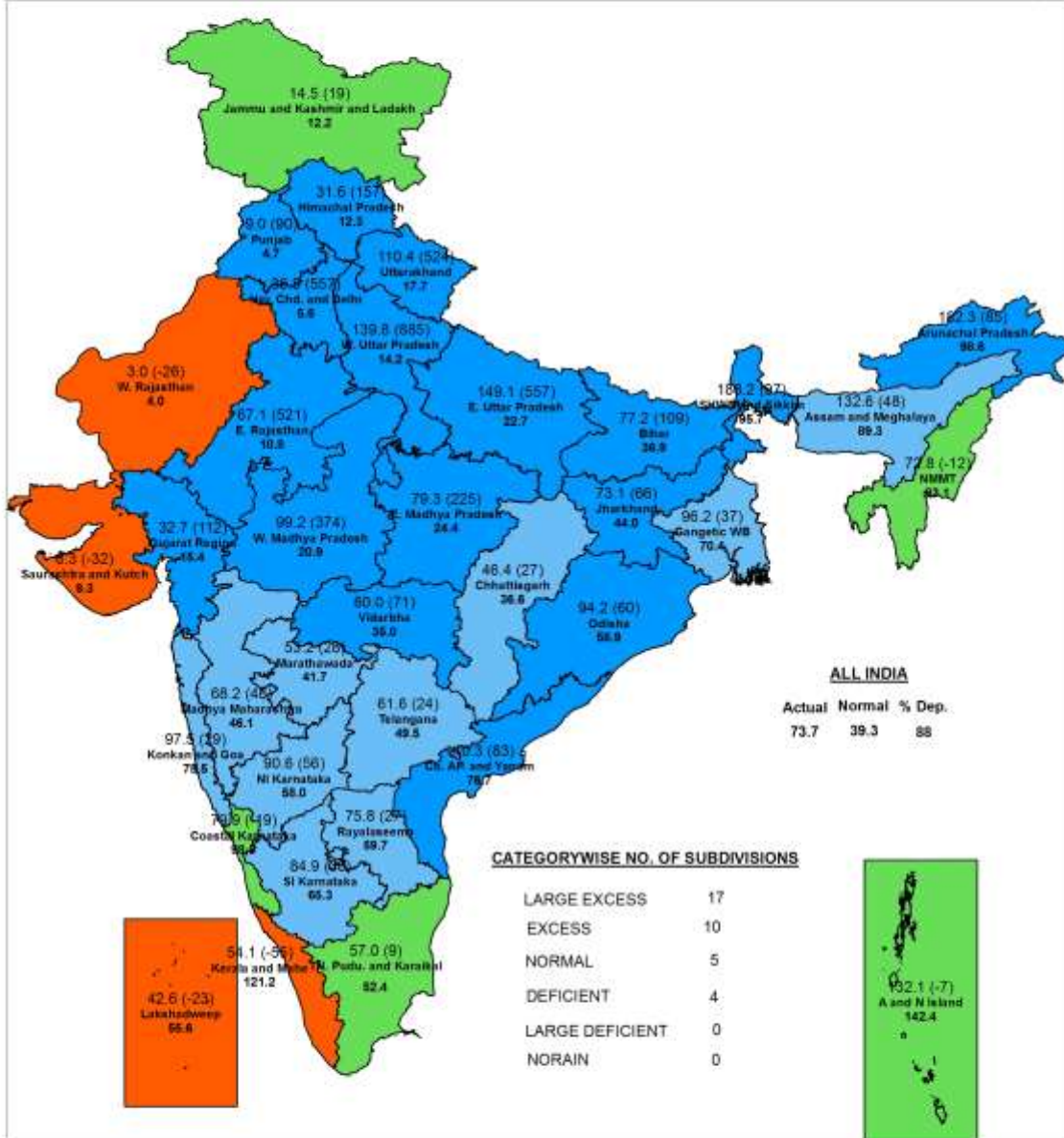
Legend
 Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-99% to -80%] No Rain [-100%] No Data

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 : 01-10-2022 To 12-10-2022



Legend

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

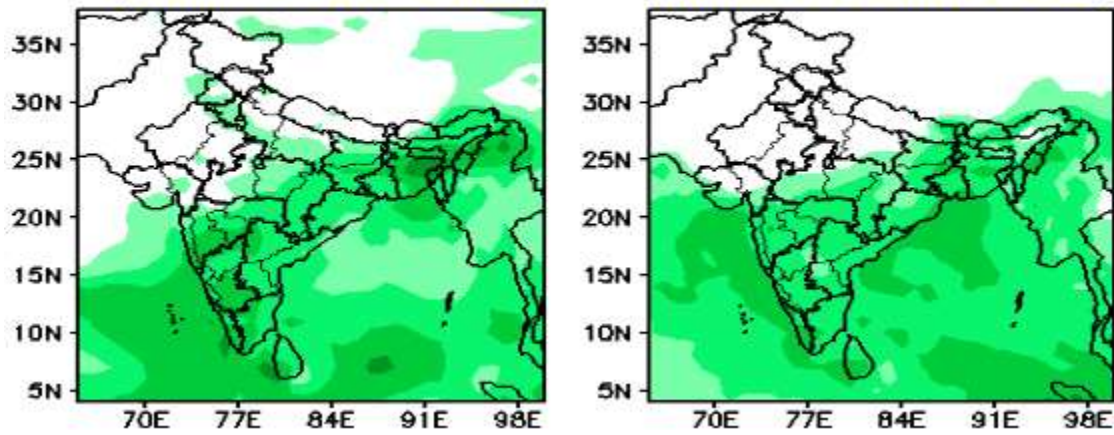
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- b) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm).
- c) Percentage Departures of rainfall are shown in brackets.

Forecast Rainfall (mm/day)

(Week1: 14Oct–20Oct)

(Week2: 21Oct–27Oct)



Forecast Rainfall Anomaly (mm/day)

(Week1: 14Oct–20Oct)

(Week2: 21Oct–27Oct)

