

Voluntary Report – Voluntary - Public Distribution

Date: October 20,2019

Report Number: IN2019-0093

Report Name: Monsoon Update - October 2019

Country: India

Post: Mumbai

Report Category: Agriculture in the Economy, National Plan, Policy and Program Announcements, Agriculture in the News, Climate Change/Global Warming/Food Security, Cotton and Products, Grain and Feed, Oilseeds and Products

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Report Highlights:

The southwest monsoon completely withdrew from the country by mid-October, ending a season where cumulative rainfall was ten percent higher than the normal fifty-year average. Kharif 2019 season planting area was marginally lower than last year with major increases in cotton area offset by reduced area in rice and pulses.

General Overview

According to the Indian Meteorological Department (IMD), overall 2019 southwest monsoon rains in India were ten percent higher than the long period average (LPA). The monsoon rains had intensified in August with rainfall 16 percent above average for the month, followed by heavy rains across Central and Southern India raising September monthly rainfall 52 percent above average. Of the total 678 districts across India, 77 percent reported normal to excess rains, with 23 percent reporting deficit rains. The states of Gujarat (Saurashtra), Rajasthan (East Rajasthan) and Madhya Pradesh (West Madhya Pradesh) reported the highest number of districts with excess rains.

Weather Outlook for the Next Two Weeks

IMD forecasts light/moderate, scattered to widespread rainfall very likely to occur over Konkan, Goa, Madhya Maharashtra, Karnataka, Coastal Andhra Pradesh and Kerala. Meanwhile, Tamil Nadu, Telangana and Rayalaseema are likely to experience light/moderate isolated to scattered rainfall. Cumulatively, above normal rainfall is very likely over Maharashtra, Karnataka, Telangana, Andhra Pradesh, south Odisha, south Chhattisgarh, Tamil Nadu, Kerala and Tripura. During week two (Oct 17-23), rainfall activity is likely to increase further with above normal rainfall very likely over Maharashtra, Karnataka, Telangana, Andhra Pradesh, East Madhya Pradesh, Odisha, Chhattisgarh, Jharkhand, Gangetic West Bengal Tamil Nadu, Kerala, Tripura and Manipur. It is likely to rain below normal over remaining parts of the country. For more details refer [IMD Press release](#).

Southwest Monsoon Withdraws as Northeast Monsoon Commences

On October 16, 2019, IMD issued a press release stating that the southwest monsoon has withdrawn from the entire country while the northeast monsoon rains have commenced over Tamil Nadu and adjoining areas of Andhra Pradesh, Karnataka and Kerala.

For more details refer [IMD Press release](#).

Kharif 2019 Sowing Progress

According to the Ministry of Agriculture and Farmers Welfare's (MOAFW) [September 27, 2019 report](#), the overall planting for *Kharif 2019* season is less than one percent lower than last year. The increase in area of cotton has been offset by the reduction in planted area for paddy and pulses. Cotton area increased by more than five percent from last year (0.66 million hectares), while the area for paddy and pulses reduced by one percent and two percent, respectively (combined area changes of 0.70 million hectares). Planted area for pulses saw significant increases in Rajasthan and Madhya Pradesh, and lower area in Maharashtra. Oilseeds area increased in Gujarat but mostly fell in Andhra Pradesh. Cotton area primarily increased in Maharashtra, Telangana and Rajasthan, with marginal area reduction reported in Gujarat.

Table 1. India: Kharif 2019 Sown Area (in million hectares)

Crop	Area Sown in 2019 on Sep 27, 2019	Area Sown in 2018 on Sep 27, 2018	Normal Area on Sep 27**	Y-o-Y Change	Change from Normal
Rice	38.234	38.692	39.625	-1.18%	-3.51%
Pulses	13.402	13.640	11.989	-1.74%	11.79%
Coarse Cereals	17.992	17.688	18.839	1.72%	-4.50%
Oilseeds	17.948	17.928	18.196	0.11%	-1.36%
Sugarcane	5.245	5.551	4.832	-5.51%	8.55%
Jute and Mesta	0.684	0.720	0.787	-5.00%	-13.09%
Cotton	12.767	12.105	12.093	5.47%	5.57%
Total	106.272	106.324	106.361	-0.05%	-0.08%

Source: Ministry of Agriculture and Farmers Welfare, Government of India

** Normal Area is the five-year average of the area from 2014-2018

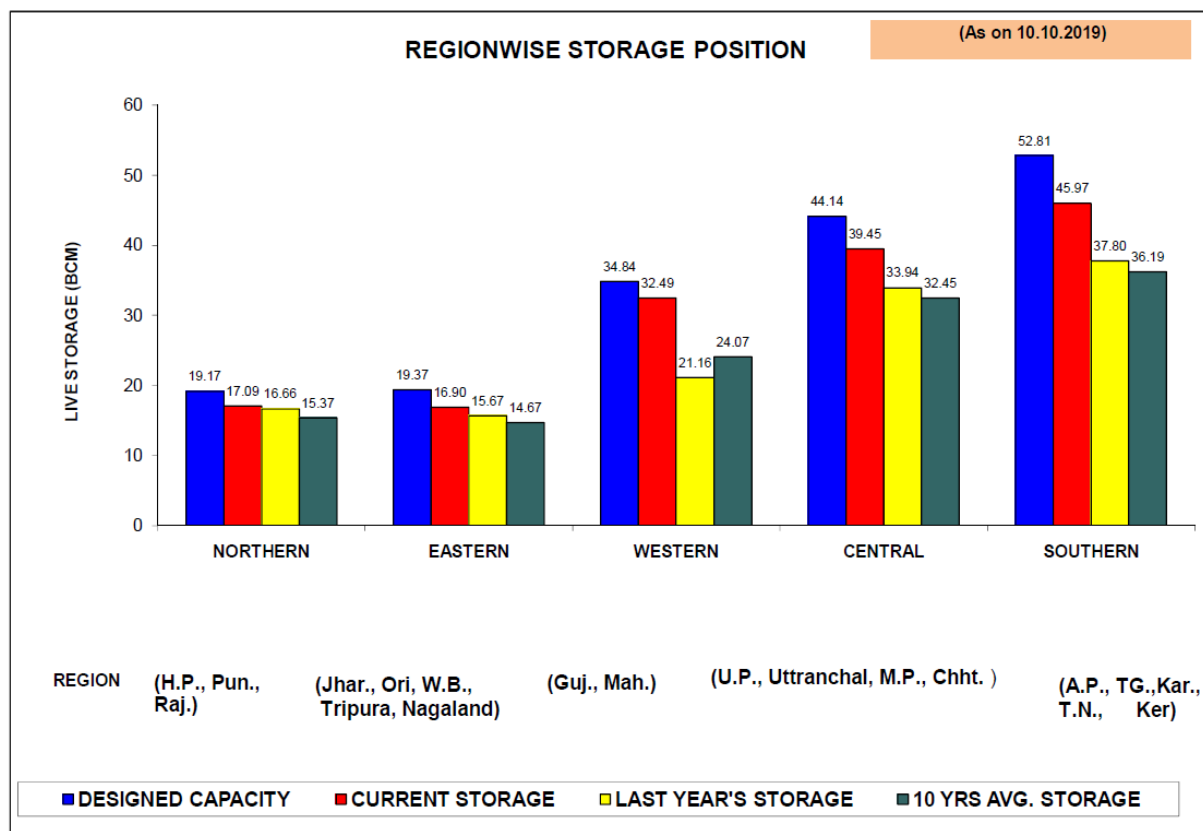
**Table 2. India: Southwest Monsoon Regional Rainfall Distribution
June 1-September 30, 2019**

Regions	2019 Actual (mm)	Normal (mm)	2019 Percentage Departure from Normal
Northwest India	586.0	599.5	-2%
Central India	1,262.8	976.6	+29%
Southern Peninsula	840.9	726.2	+16%
East and Northeast India	1,240.7	1,410.4	-12%
All India	968.3	880.6	+10%

* Normal rainfall is the fifty-year average of rainfall from 1951-2000

Source: Indian Meteorological Department

Image 1. India: Storage Status at 107 Major Reservoirs in Billion Cubic Meters (BCM) as on October 10, 2019



Source: Central Water Commission, Ministry of Jal Shakti

Image 2: India: Monthly Rainfall Statistics in mm (southwest monsoon 2019)

RAINFALL STATISTICS - MONSOON 2019

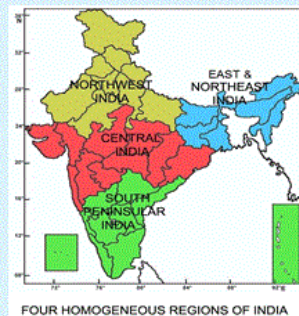
JUNE - 2019	1- Jun	TO	30-Jun
REGION	ACTUAL	NORMAL	% DEP
COUNTRY AS A WHOLE	112.1	166.9	-32.8
NORTHWEST INDIA	51.0	75.3	-32.2
EAST & NORTHEAST INDIA	218.2	347.1	-37.1
CENTRAL INDIA	117.3	169.2	-30.7
SOUTH PENINSULA	112.8	160.2	-29.6

JULY - 2019	1- Jul	TO	31-Jul
REGION	ACTUAL	NORMAL	% DEP
COUNTRY AS A WHOLE	298.3	285.3	4.6
NORTHWEST INDIA	214.7	212.2	1.2
EAST & NORTHEAST INDIA	478.4	432.0	10.7
CENTRAL INDIA	350.4	322.8	8.6
SOUTH PENINSULA	193.9	216.7	-10.5

AUGUST -2019	1- Aug	TO	31-Aug
REGION	ACTUAL	NORMAL	% DEP
COUNTRY AS A WHOLE	297.8	258.2	15.4
NORTHWEST INDIA	200.1	202.7	-1.3
EAST & NORTHEAST INDIA	214.0	346.0	-38.1
CENTRAL INDIA	427.9	307.3	39.2
SOUTH PENINSULA	296.1	189.2	56.5

SEPTEMBER-2019	1- Sep	TO	30-Sep
REGION	ACTUAL	NORMAL	% DEP
COUNTRY AS A WHOLE	259.2	170.2	52.3
NORTHWEST INDIA	120.9	109.4	10.5
EAST & NORTHEAST INDIA	324.2	285.2	13.7
CENTRAL INDIA	367.1	177.2	107.2
SOUTH PENINSULA	238.2	160.1	48.8

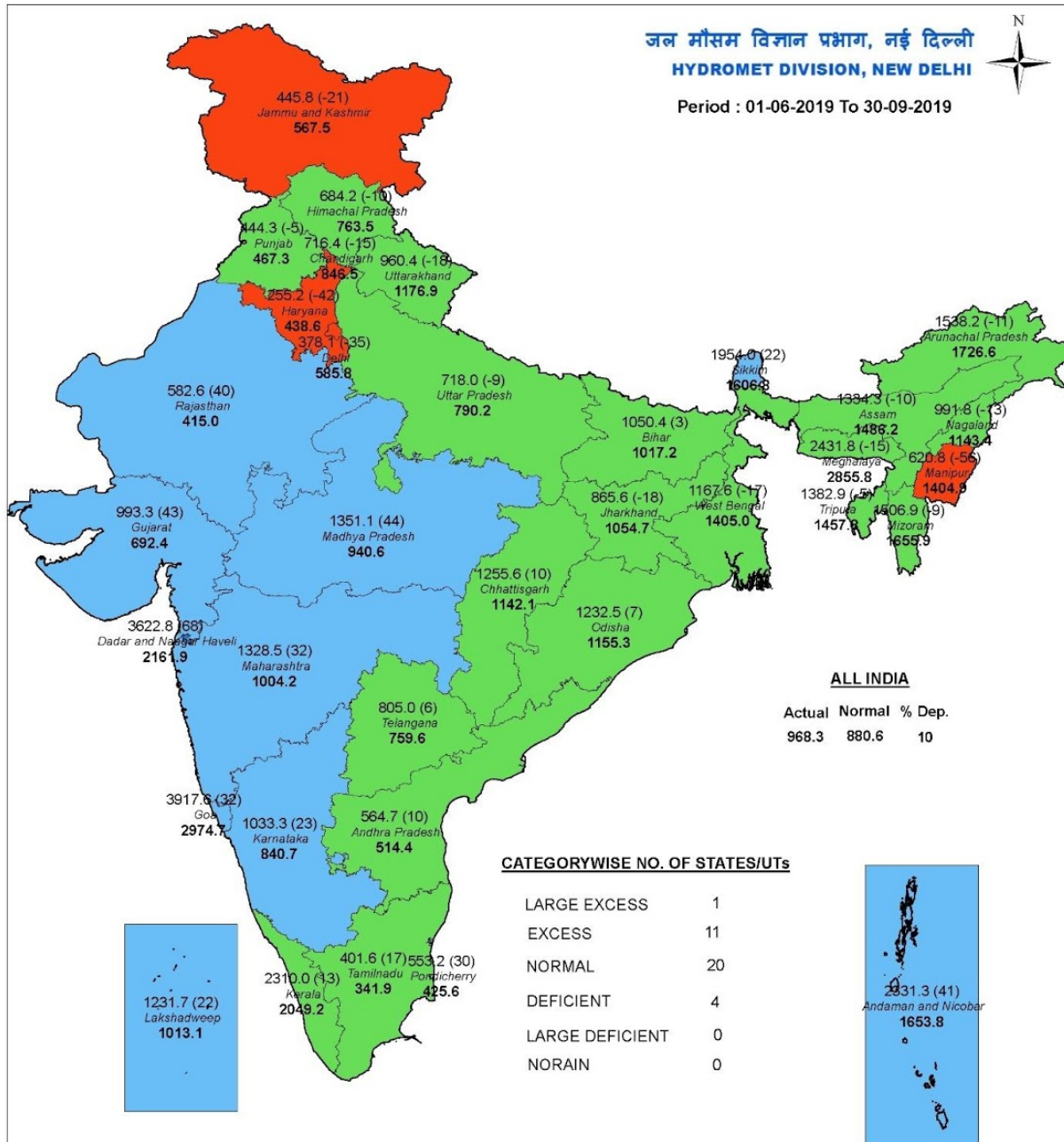
CUMULATIVE SEASONAL RAINFALL	1- Jun	TO	30-Sep
REGION	ACTUAL	NORMAL	% DEP
COUNTRY AS A WHOLE	968.3	880.6	10.0
NORTHWEST INDIA	586.0	599.5	-2.2
EAST & NORTHEAST INDIA	1240.7	1410.4	-12.0
CENTRAL INDIA	1262.8	976.6	29.3
SOUTH PENINSULA	840.9	726.2	15.8



(Based on real time data)

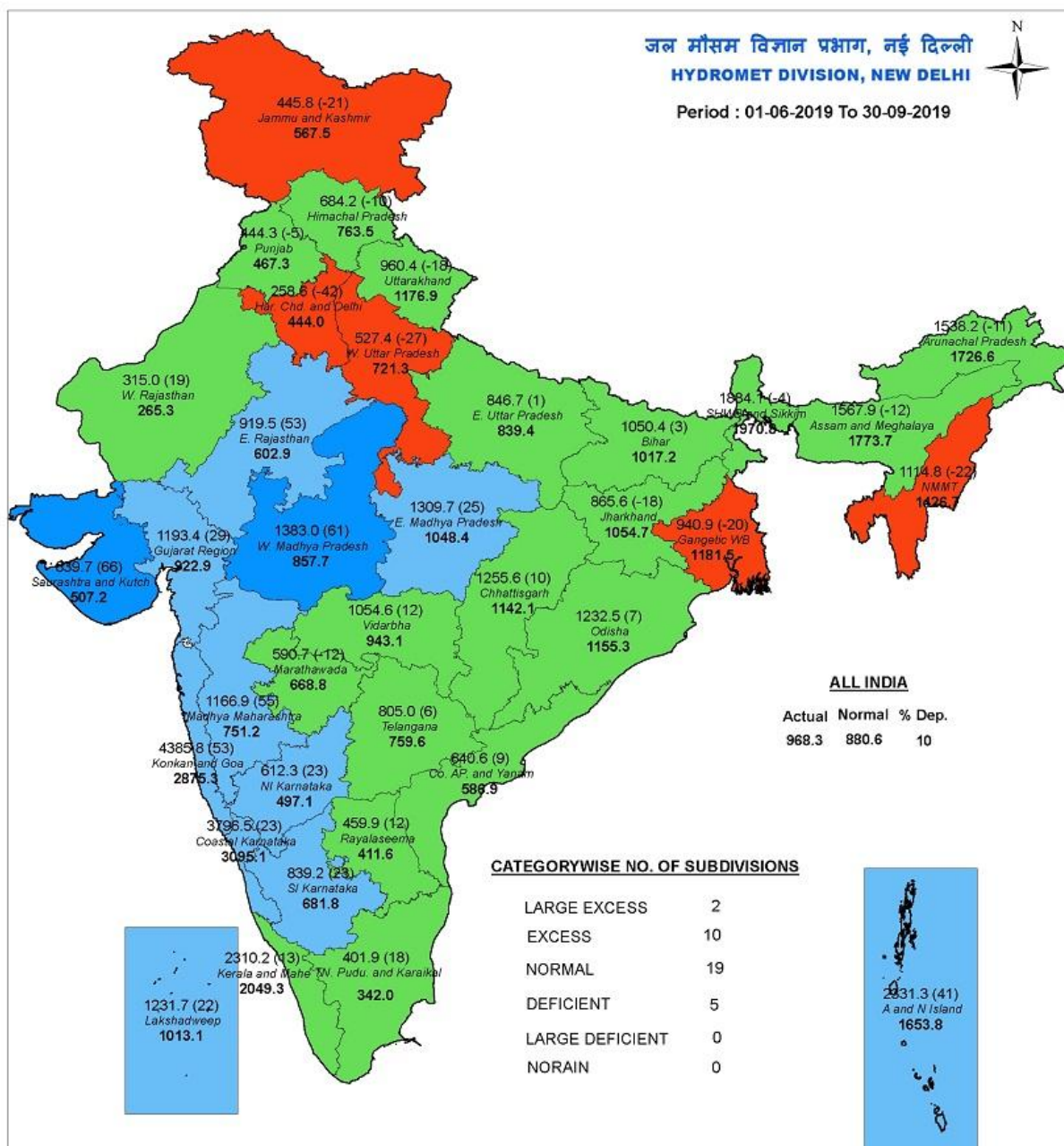


STATE RAINFALL MAP



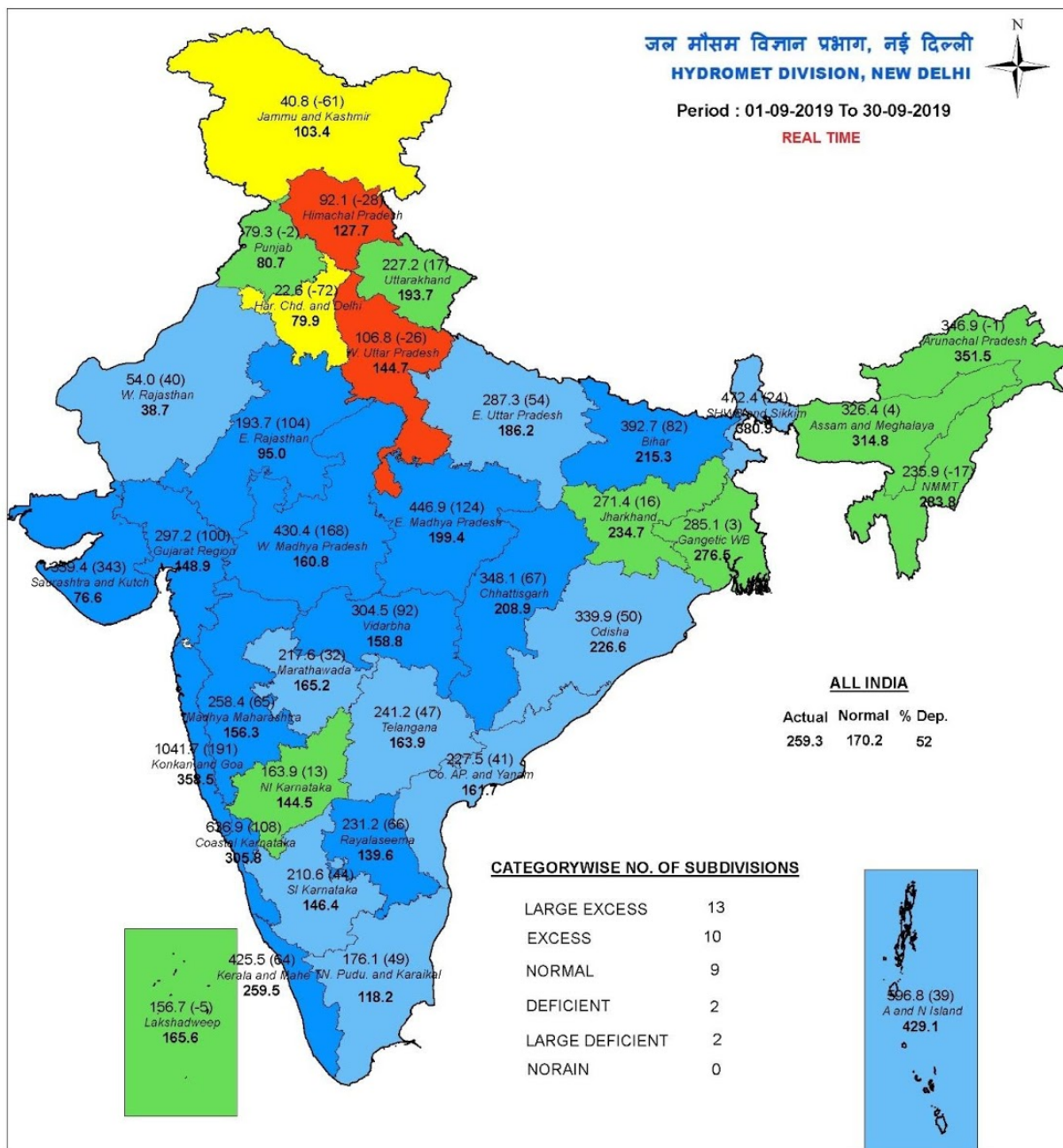


SUBDIVISION RAINFALL MAP











SUBDIVISION RAINFALL MAP



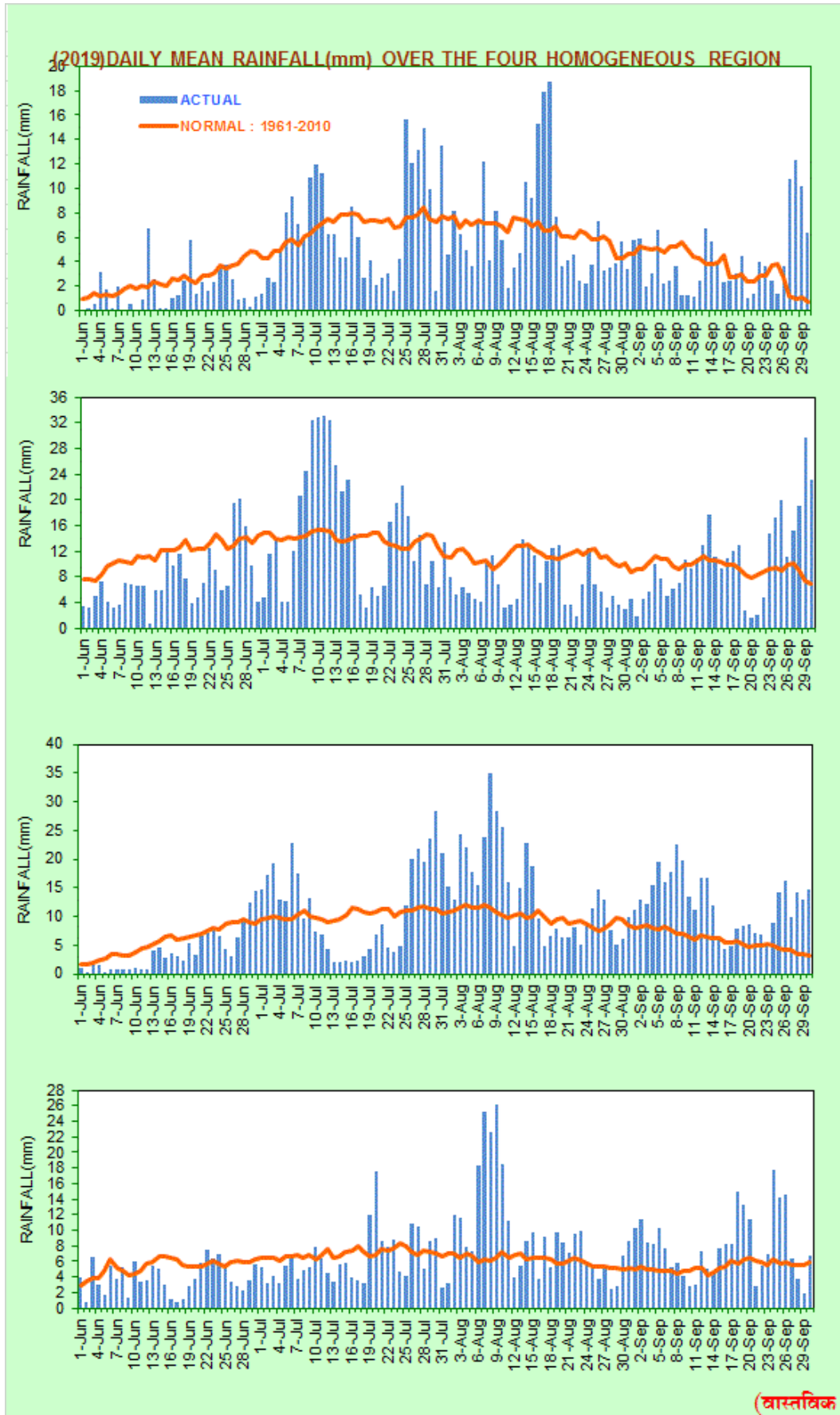
PROGRESS OF MONSOON 2019 WEEK BY WEEK

S.NO	MET.SUBDIVISION	WEEK ENDINGS																	
		5-Jun	12-Jun	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	24-Jul	31-Jul	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	18-Sep	25-Sep	30-Sep
1	A & N ISLANDS																		
2	ARUNACHAL PRADESH																		
3	ASSAM & MEGHALAYA																		
4	NAG.,MANI.,MIZO.& TRIPURA																		
5	S.H.W.B. & SIKKIM																		
6	GANGATIC W.B.																		
7	ODISHA																		
8	JHARKHAND																		
9	BIHAR																		
10	EAST U.P.																		
11	WEST U.P.																		
12	UTTARAKHAND																		
13	HAR., CHANDI.& DELHI																		
14	PUNJAB																		
15	HIMACHAL PRADESH																		
16	JAMMU & KASHMIR																		
17	WEST RAJASTHAN																		
18	EAST RAJASTHAN																		
19	WEST M.P.																		
20	EAST M.P.																		
21	GUJARAT REGION																		
22	SAURASHTRA & KUTCH																		
23	KONKAN & GOA																		
24	MADHYA M'RASHTRA																		
25	MARATHAWADA																		
26	VIDARBHA																		
27	CHATTISGARH																		
28	COASTAL A. P.& YANAM																		
29	TELANGANA																		
30	RAYALASEEMA																		
31	TAMIL., PUDU. & KARAIKAL																		
32	COASTAL KARNATAKA																		
33	N.I.KARNATAKA																		
34	S.I.KARNATAKA																		
35	KERALA & MAHE																		
36	LAKSHADWEEP																		

LEGEND:

 LARGE EXCESS +60% OR MORE	 EXCESS +20% TO +59%	 NORMAL +19% TO -19%
 DEFICIENT -20% TO -59%	 LARGE DEFICIENT -60% OR LESS	 NO RAIN

(वास्तविक समय के आंकड़ों पर आधारित)



STATE-WISE RAINFALL (MM) DISTRIBUTION

S. NO.	STATES	WEEK: 26.09.2019		TO 02.10.2019		PERIOD: 01.06.2019		TO 30.09.2019	
		ACTUAL	NORMAL	% DEP.	CAT.	ACTUAL	NORMAL	% DEP.	CAT.
EAST & NORTH EAST INDIA									
1	ARUNACHAL PRADESH	20.9	69.9	-70%	LD	1538.2	1726.6	-11%	N
2	ASSAM	47.5	51.2	-7%	N	1334.3	1486.2	-10%	N
3	MEGHALAYA	175.1	87.5	100%	LE	2431.8	2855.8	-15%	N
4	NAGALAND	52.7	47.0	12%	N	991.8	1143.4	-13%	N
5	MANIPUR	49.6	68.7	-28%	D	620.8	1404.9	-56%	D
6	MIZORAM	38.3	76.5	-50%	D	1506.9	1655.9	-9%	N
7	TRIPURA	56.9	56.6	1%	N	1382.9	1457.8	-5%	N
8	SIKKIM	38.4	61.1	-37%	D	1954.0	1606.8	22%	E
9	WEST BENGAL	109.9	67.4	63%	LE	1167.6	1405.0	-17%	N
10	JHARKHAND	158.3	41.2	284%	LE	865.6	1054.7	-18%	N
11	BIHAR	247.0	40.2	514%	LE	1050.4	1017.2	3%	N
NORTH WEST INDIA									
1	UTTAR PRADESH	101.1	13.5	649%	LE	718.0	790.2	-9%	N
2	UTTARAKHAND	91.6	13.8	564%	LE	960.4	1176.9	-18%	N
3	HARYANA	8.0	4.0	99%	LE	255.2	438.6	-42%	D
4	CHANDIGARH (UT)	105.7	12.0	781%	LE	716.4	846.5	-15%	N
5	DELHI	1.9	9.4	-80%	LD	378.1	585.8	-35%	D
6	PUNJAB	34.8	7.3	377%	LE	444.3	467.3	-5%	N
7	HIMACHAL PRADESH	61.4	9.1	575%	LE	684.2	763.5	-10%	N
8	JAMMU & KASHMIR	25.9	9.8	164%	LE	445.8	567.5	-21%	D
9	RAJASTHAN	34.7	4.1	746%	LE	582.6	415.0	40%	E
CENTRAL INDIA									
1	ODISHA	67.6	36.3	86%	LE	1232.5	1155.3	7%	N
2	MADHYA PRADESH	93.9	15.3	514%	LE	1351.1	940.6	44%	E
3	GUJARAT	124.9	11.5	986%	LE	993.3	692.4	43%	E
4	DADRA & NAGAR HAVELI (UT)	58.5	59.7	-2%	N	3622.8	2161.9	68%	LE
5	DAMAN & DIU (UT)	104.5	43.9	138%	LE	2161.6	1611.2	34%	E
6	GOA	26.5	66.6	-60%	LD	3917.6	2974.7	32%	E
7	MAHARASHTRA	40.4	34.4	18%	N	1328.5	1004.2	32%	E
8	CHHATISGARH	88.4	24.5	261%	LE	1255.6	1142.1	10%	N
SOUTH PENINSULA									
1	A & N ISLAND (UT)	8.3	113.6	-93%	LD	2331.3	1653.8	41%	E
2	ANDHRA PRADESH	36.8	40.2	-8%	N	564.7	514.4	10%	N
3	TELANGANA	47.7	32.3	48%	E	805.0	759.6	6%	N
4	TAMILNADU	34.8	33.0	6%	N	401.6	341.9	17%	N
5	PUDUCHERRY (UT)	42.4	36.1	17%	N	553.2	425.6	30%	E
6	KARNATAKA	44.2	45.1	-2%	N	1033.3	840.7	23%	E
7	KERALA	59.6	65.4	-9%	N	2310.0	2049.3	13%	N
8	LAKSHADWEEP (UT)	48.7	37.1	31%	E	1231.7	1013.1	22%	E
COUNTRY AS A WHOLE		68.9	28.0	146%		968.3	880.6	10%	

CATEGORYWISE DISTRIBUTION OF NO. OF STATES

CATEGORY	WEEK: 26.09.2019 TO 02.10.2019				PERIOD: 01.06.2019 TO 30.09.2019			
	NO. OF STATES				NO. OF STATES			
LARGE EXCESS	17				1			
EXCESS	2				11			
NORMAL	10				20			
DEFICIENT	3				4			
LARGE DEFICIENT	4				0			
NO RAIN	0				0			
NO DATA	0				0			

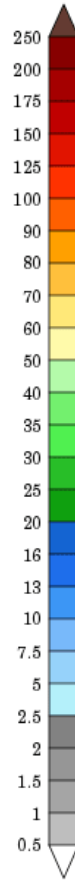
Precipitation Forecasts

Precipitation (mm)
during the period:

Tue, 15 OCT 2019 at 00Z

-to-

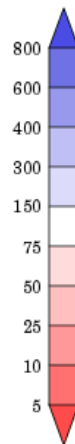
Wed, 23 OCT 2019 at 00Z



Wed, 23 OCT 2019 at 00Z

-to-

Thu, 31 OCT 2019 at 00Z

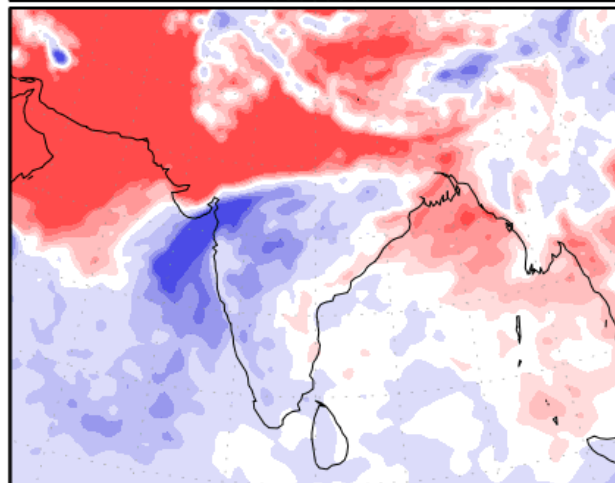
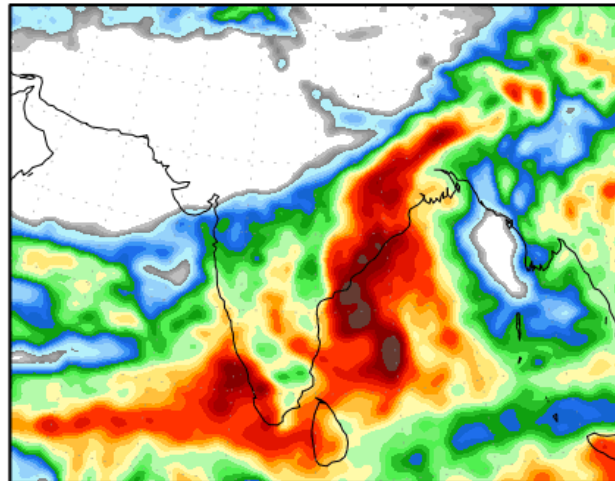
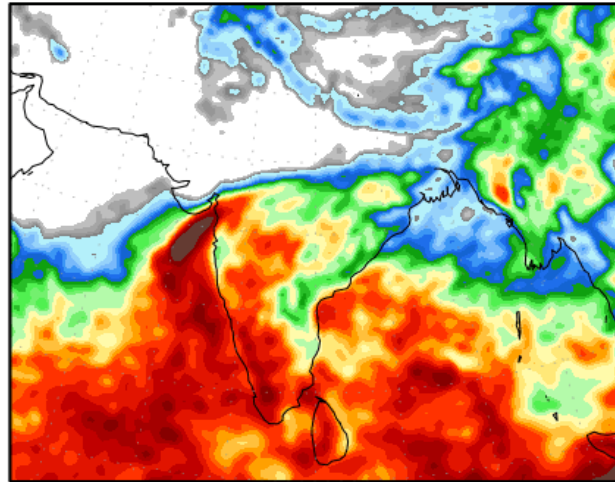


Precipitation (% of normal)
during the first period:

Tue, 15 OCT 2019 at 00Z

-to-

Wed, 23 OCT 2019 at 00Z



Precipitation forecasts from the National Centers for Environmental Prediction.
Normal rainfall derived from Xie-Arkin (CMAP) Monthly Climatology for 1979-2003.
Forecast Initialization Time: 00Z15OCT2019

GrADS/COLA

Attachments:

No Attachments.