

Voluntary Report – Voluntary - Public Distribution

Date: April 17,2020

Report Number: IN2020-0019

Report Name: Normal Southwest Monsoon Forecast for 2020

Country: India

Post: Mumbai

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

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Report Highlights:

On April 15, 2020, the Indian Meteorological Department (IMD) forecasted a normal Southwest Monsoon for 2020 suggesting that June to September rainfall will likely match the Long Period Average (LPA) of 88 cm. Above normal high temperatures are forecast from April to June due to an expected heat wave across most of the country.

General Information

On April 15, 2020, the Indian Meteorological Department (IMD) forecasted a normal Southwest Monsoon for 2020 suggesting that June to September rainfall will match the Long Period Average (LPA) with a model error of plus/minus 5 percent. Southwest monsoon seasonal (June to September) rainfall over the entire country is expected to be normal (96-104 percent). The LPA of the season's rainfall over the country as a whole for the period 1961-2010 is 88 cm. The forecast suggests a maximum probability (41 percent) for normal rainfall during the upcoming season that is expected to result in well-distributed rainfall across the country.

Monsoon onset date to be announced on May 15, 2020

IMD will issue updated forecasts during the last week of May/ first week of June as a part of the second stage forecast. IMD will also issue separate forecasts for monthly (July and August) rainfall for the entire country and seasonal (June-September) rainfall over the four broad geographical regions of India. For more details, please refer: [IMD first stage Southwest Monsoon forecast](#)

IMD revised normal monsoon onset and withdrawal dates

IMD has revised the normal onset and withdrawal dates based on data during the periods of 1961-2019 and 1971-2019, respectively. As per the new data set, monsoon onset over Kerala remains the same at June 1st. However, new monsoon advance dates over the states of Maharashtra, Gujarat, Madhya Pradesh, Chhattisgarh, Telangana, Andhra Pradesh, Odisha, Jharkhand, Bihar and parts of Uttar Pradesh are delayed by 3-7 days compared to existing normal dates. However, in Northwest India, the monsoon is expected to arrive earlier on July 8 compared to the previous date of July 15.

There are noteworthy changes in the monsoon withdrawal dates for Northwest India with withdraws almost 7-14 days later from the existing dates. There is no change in the final withdrawal date over south India around October 15. For more details, please refer: [IMD new Southwest Monsoon onset and withdrawal dates](#)

Seasonal Outlook for temperatures from April – June 2020

On March 30, 2020, the IMD forecasted warmer seasonal average maximum temperatures by 0.5-1.0 degree Celsius over some of the meteorological subdivisions of northwest India and western peninsular India.

According to IMD, there is 40 percent probability of maximum temperatures in the core heat wave zone during April to June 2020 to be above normal. The core heat wave zone covers the states of Punjab, Himachal Pradesh, Uttarakhand, Delhi, Haryana, Rajasthan, Uttar Pradesh, Gujarat, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal, Orissa and Telangana along with meteorological subdivisions of Marathwada, Madhya Maharashtra and Coastal Andhra Pradesh

Note: According to the IMD, a heat wave is considered if the maximum temperature of a weather station reaches at least 40°C or more in plain areas, 37°C or more for coastal areas, and at least 30°C or more for hilly areas. For more details, please refer: [IMD Seasonal Outlook Temperature for April-June, 2020](#)

Table 1. Probability Forecast for Southwest Monsoon 2020

Category	Rainfall Range (% of LPA)	Forecast Probability (%)
Deficient	Less than 90	9
Below Normal	Between 90-96	20
Normal	Between 96-104	41
Above Normal	Between 104-110	21
Excess	Greater than 110	9

Source: Indian Meteorological Department

Table 2. IMD Southwest Monsoon Onset date (actual vs forecast)

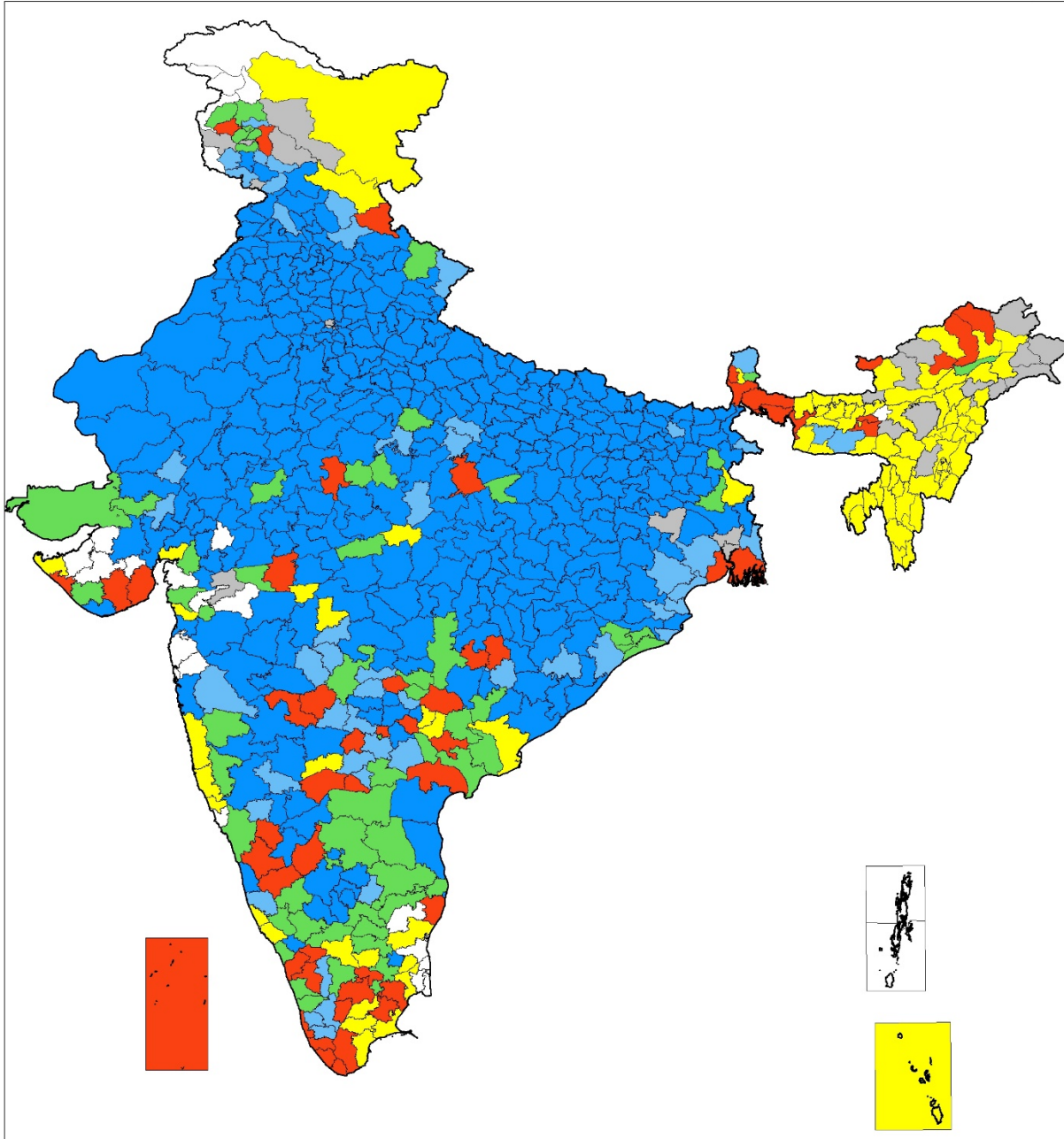
Year	Actual Onset Date	Forecast Onset Date	Actual Rainfall (% of LPA)
2014	6th June	5th June	88
2015	5th June	30th May	86
2016	8th June	7th June	97
2017	30th May	30th May	95
2018	29th May	29th May	91
2019	8th June	6th June	110

Source: Indian Meteorological Department



DISTRICT RAINFALL MAP

Period : 01-03-2020 To 15-04-2020



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

NOTES :

a) RainFall figures are based on operation data.



STATE-WISE RAINFALL DISTRIBUTION

S NO	MET. SUBDIVISION/UT/STATE/DISTRICT	Day:15-04-2020				Period:01-03-2020 To 15-04-2020			
		ACTUAL (mm)	NORMAL (mm)	%DEP.	CAT.	ACTUAL (mm)	NORMAL (mm)	% DEP.	CAT.
REGION : EAST AND NORTH EAST INDIA									
1	ARUNACHAL PRADESH	0.0	8.8	-100%	NR	102.4	326.7	-69%	LD
2	ASSAM	0.0	5.1	-100%	NR	36.2	148.5	-76%	LD
3	MEGHALAYA	0.0	5.6	-100%	NR	96.5	171.1	-44%	D
4	NAGALAND	0.0	2.8	-100%	NR	24.1	112.4	-79%	LD
5	MANIPUR	0.0	5.8	-100%	NR	18.8	116.9	-84%	LD
6	MIZORAM	0.0	2.3	-100%	NR	15.6	142.6	-89%	LD
7	TRIPURA	0.0	4.8	-100%	NR	24.0	164.6	-85%	LD
8	SIKKIM	0.0	6.2	-100%	NR	247.9	223.2	11%	N
9	WEST BENGAL	1.7	1.8	-7%	N	58.9	52.2	13%	N
10	JHARKHAND	0.6	0.4	41%	E	94.7	21.3	345%	LE
11	BIHAR	8.4	0.6	1306%	LE	54.8	11.5	377%	LE
REGION : NORTH WEST INDIA									
1	UTTAR PRADESH	0.0	0.3	-96%	LD	42.3	9.9	327%	LE
2	UTTARAKHAND	2.7	1.5	78%	LE	123.6	70.3	76%	LE
3	HARYANA	0.0	0.6	-100%	NR	69.9	16.0	337%	LE
4	CHANDIGARH (UT)	0.0	0.9	-100%	NR	73.8	41.2	79%	LE
5	DELHI (UT)	0.0	1.1	-100%	NR	70.3	18.9	272%	LE
6	PUNJAB	0.0	0.7	-100%	NR	88.2	30.9	185%	LE
7	HIMACHAL PRADESH	0.5	2.9	-84%	LD	175.6	143.4	22%	E
8	JAMMU & KASHMIR	7.8	4.4	77%	LE	235.9	204.8	15%	N
9	RAJASTHAN	0.0	0.3	-100%	NR	20.5	6.4	220%	LE
REGION : CENTRAL INDIA									
1	ODISHA	0.0	0.7	-97%	LD	77.1	37.3	107%	LE
2	MADHYA PRADESH	0.3	0.1	237%	LE	28.3	8.8	222%	LE
3	GUJARAT	0.0	0.1	-100%	NR	2.1	1.3	58%	E
4	DADAR & NAGAR HAVELI (UT)	0.0	0.0	-100%	NR	0.0	0.0	-100%	NR
5	DAMAN & DIU (UT)	0.0	0.0	-100%	NR	0.0	0.3	-100%	NR
6	GOA	0.0	0.1	-100%	NR	0.9	5.5	-83%	LD
7	MAHARASHTRA	0.1	0.2	-69%	LD	17.2	8.8	95%	LE
8	CHHATTISGARH	0.3	0.4	-36%	D	57.5	15.7	266%	LE
REGION : SOUTH PENINSULA									
1	ANDAMAN & NICOBAR (UT)	0.0	1.7	-100%	NR	2.8	47.2	-94%	LD
2	ANDHRA PRADESH	0.0	0.6	-100%	NR	25.6	19.0	35%	E
3	TELANGANA	0.0	0.6	-99%	LD	24.0	18.9	27%	E
4	TAMIL NADU	0.2	1.5	-90%	LD	21.4	39.4	-46%	D
5	PUDUCHERRY (UT)	0.0	0.2	-100%	NR	0.6	36.0	-98%	LD
6	KARNATAKA	0.0	1.3	-100%	NR	31.6	22.6	40%	E
7	KERALA	0.2	3.0	-95%	LD	78.5	81.3	-3%	N
8	LAKSHADWEEP (UT)	0.0	0.8	-100%	NR	16.4	30.7	-46%	D
COUNTRY :		0.9	1.3	-29%		55.2	47.7	16%	

CATEGORYWISE DISTRIBUTION OF NO.OF STATES

CATEGORY	Day:15-04-2020	Period:01-03-2020 To 15-04-2020
	NO.OF STATES	NO.OF STATES
Large Excess	4	13
Excess	1	5
Normal	1	4
Deficient	1	3
Large Deficient	7	9
NoRain	22	2
NoData	0	0

Attachments:

No Attachments.