



Voluntary Report - Voluntary - Public Distribution

Date: January 13,2021

Report Number: IN2021-0011

Report Name: Normal Northeast Monsoon Rainfall Supports Higher Rabi Crop Area

Country: India

Post: Mumbai

Report Category: Agriculture in the Economy, Agriculture in the News, Climate Change/Global Warming/Food Security, Grain and Feed, Oilseeds and Products

Prepared By: Dhruv Sood

Approved By: Lazaro Sandoval

Report Highlights:

Rainfall during the 2020 northeast monsoon season (October-December) was one percent higher (125 mm) than the normal fifty-year average. Planting area for the rabi (winter) crop is three percent higher compared to last year with increased area for wheat, rice, pulses, and oilseeds.

General Information

The southwest monsoon withdrew from India on October 28, 2020 while the northeast monsoon set in on the same date. Rainfall during the northeast monsoon, also referred to as the post-monsoon season (October-December), was 101 percent of the long period average (LPA). Rainfall during the northeast monsoon season over the core region of the south peninsula (comprised of five subdivisions including Coastal Andhra Pradesh, Rayalaseema, Tamil Nadu and Puducherry, south interior Karnataka, and Kerala) was also normal (110 percent of LPA). While all the subdivisions of the core region received excess/normal rainfall, Kerala was the only region to receive deficit rains (26 percent lower than the LPA). As such, rainfall in the south peninsula region is the highest since 2016. Typically, the five meteorological subdivisions of Tamil Nadu, Coastal Andhra Pradesh, Rayalaseema, Kerala and south interior Karnataka receive about 30 percent of their annual rainfall during the northeast monsoon season (October to December). Tamil Nadu receives about 48 percent of its annual rainfall during this season. Across India, almost 54 percent of all subdivisions received excess/normal rainfall, while 46 percent were deficient during this season.

Rainfall Forecast for the Next Two Weeks

According to the Indian Meteorological Department (IMD), below normal rain/snow is forecast during January 14-20 in the Western Himalayan region (Jammu Kashmir, Ladakh, and Himachal Pradesh), due to the absence of Western Disturbance storms. Due to the prevalence of dry north/northwestern winds, minimum temperatures are expected to be below normal over most parts of Northwest India during the next 4-5 days, which will likely result in cold/severe cold conditions in parts of Punjab, Haryana, Chandigarh, Delhi, Uttar Pradesh, and Uttarakhand during the next three days. Cold wave/severe cold wave conditions are also likely over parts of Punjab, Haryana, Chandigarh, Delhi, Uttar Pradesh, and Rajasthan during the next 3 days. Ground frost is also very likely in isolated pockets of south Punjab, Haryana, Chandigarh, and north Rajasthan during the next two days. Isolated heavy to very heavy rainfall is very likely over Tamil Nadu, Puducherry and Karaikal, Kerala, and Mahe. Rainfall is very likely to be above normal over extreme southeast Peninsular India while below normal rainfall is expected over the Western Himalayan region during January 22-28. For more details, please refer to the IMD press release.

Rabi Planting

On January 8, the Ministry of Agriculture and Farmers Welfare's (MOAFW) published its sowing progress report for the 2020/21 Rabi crop. According to the report, overall Rabi planted area has increased by three percent over last year, and four percent compared to the five-year average. Planted area for pulses (Gujarat and Maharashtra) and oilseeds (Jharkhand and Rajasthan) has increased by five percent, respectively, compared to last year, while area for wheat (Madhya Pradesh and Bihar) and rice (Telangana and Andhra Pradesh) has increased by three percent, respectively. While an increase in area has occurred for most crops, course cereals have experienced a decline in planted area in Maharashtra (millets), Andhra Pradesh (millets and maize), and Karnataka (maize). For more details, please refer to All India Crop Situation dated January 8, 2021.

Reservoir Storage

The Central Water Commission monitors the live storage status of 128 reservoirs around the country on a weekly basis. As per the reservoir storage bulletin of December 31, 2020, the live storage available in these reservoirs is 123.88 billion cubic meters (BCM), which is 72 percent of total live storage capacity. The live storage available in these reservoirs for the corresponding period last year was 135.79 BCM (79

percent of storage capacity), and the average of the last 10 years live storage was 102.51 BCM (60 percent). As such, the current storage position is less than the corresponding period last year, but better than the average storage level of the last ten years during the same period.

Out of 128 reservoirs, 116 reservoirs reported more than 80 percent of normal storage levels and 12 reservoirs reported 80 percent or below of normal storage. Out of these 12 reservoirs, 9 have 51-80 percent of normal storage, and 3 reservoirs have up to 50 percent of normal storage. According to the Central Water Commission, *normal storage* represents the average storage level of the last ten years, *close to normal storage* represents a shortfall of up to 20 percent of normal, *deficient storage* is where the shortfall is greater than 20 percent of the normal and up to 60 percent of the normal, *highly deficient* is a shortfall of more than 60 percent of normal.

States that have better storage levels (in percentage) than last year for the corresponding period include Tripura, Nagaland, Chhattisgarh, Andhra Pradesh and Telangana (which includes two combined projects between the two states), and Kerala. For more details please refer to the <u>Reservoir Storage Bulletin of December 31, 2020</u>.



जल मौसम विज्ञान प्रभाग, नई दिल्ली HYDROMET DIVISION, NEW DELHI



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.

b) Small figures indicate actual rainfal (mm), while bold figures indicate Normal rainfall (mm).

c) Percentage Departures of rainfall are shown in brackets.



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 c) Percentage Departures of rainfall are shown in brackets.

Regions	2020 Actual (mm)	Normal (mm)*	2019 Actual (mm)	2018 Actual (mm)	2017 Actual (mm)	2016 Actual (mm)
Northwest India	33.8	55.1	98.6	34.8	27.5	16.7
Central India	84.9	75.9	124.0	38.6	72.3	68.5
Southern Peninsula	317.9	276.6	322.5	173.9	243.6	109.4
East and Northeast India	142.1	166.5	154.4	83.8	200.9	125.0
All India	124.1	123.3	160.0	71.2	112.7	69.7

Table 1 India: Regional Rainfall Distribution .	October 1. December 31 2020
Table 1, Inula, Regional Rannan Distribution	- October 1- December 51, 2020

* Normal rainfall is the fifty-year average of rainfall from 1951-2000 Source: Indian Meteorological Department

Chart 1. India: Cumulative Northeast Monsoon rainfall (Oct/Dec) During the Corresponding Period for the Last Five years



Source: Indian Meteorological Department

Fahle 2	India	Northeast	Monsoon	Monthly	' Rainfall
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Month	2020 Actual (mm)	Normal (mm)**	2020 Percentage Departure from Normal
October	78.1	76.0	2.8%
November	29.2	30.4	-3.9%
December	17.0	17.4	-2.3%
All India	124.6	123.8	0.6%

Source: Indian Meteorological Department

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

Region	Volume on December 31, 2020 (in BCM)	Total Capacity (in BCM)	Percentage of Capacity on December 31, 2019	Percentage of Capacity on December 31, 2020	10-Year Average (2008-2018) Capacity Level on December 31
Northern Region	8.75	19.17	46%	68%	59%
Eastern Region	13.19	19.65	67%	82%	71%
Western Region	29.41	35.24	83%	86%	59%
Central Region	33.22	45.27	73%	81%	62%
Southern Region	39.32	52.81	74%	75%	54%
All India	123.89	172.14	72%	79%	60%

Table 3. India. Storage Status at 91 Major Reservoirs in Billion Cubic Meters (BCM)

Source: Ministry of Water Resources, River Development and Ganga Rejuvenation



Сгор	Area Sown in 2020-21 on January 7, 2021	Area Sown in 2019-20 on January 7, 2020	Normal Area on January 7 (2014-2018)**	Y-o-Y Change	Change from Normal
Wheat	33.546	32.675	30.328	3%	11%
Rice	1.876	1.826	4.179	3%	-55%
Pulses	15.958	15.267	14.488	5%	10%
Coarse Cereals	4.845	5.218	5.714	-7%	-15%
Oilseeds	8.180	7.779	7.318	5%	12%
Total	64.405	62.765	62.027	3%	4%

 Table 4. India. Rabi 2020-21 Sown Area (in million hectares)

Source: Ministry of Agriculture and Farmers Welfare, Government of India ** Normal Area is the five-year average of the area from 2014-2018

S.	CT ATTC	PERIOD FROM :		01.10.2020		TO	31	.12.2020	
NO.	STATES	LE	E	N	D	LD	NR	ND	TOTAL
1	A & N ISLAND (UT)	1	1	1	0	0	0	0	3
2.	ARUNACHAL PRADESH	1	2	5	6	1	0	1	16
3.	ASSAM	3	11	2	10	1	0	0	27
4.	MEGHALAYA	1	3	0	2	1	0	0	7
5.	NAGALAND	2	3	3	1	2	0	0	11
6.	MANIPUR	0	2	4	2	1	0	0	9
7.	MIZORAM	0	2	4	1	1	0	0	8
8.	TRIPURA	0	2	2	0	0	0	0	4
9.	SIKKIM	0	0	1	1	2	0	0	4
10.	WEST BENGAL	0	0	3	8	8	0	0	19
11.	ODISHA	7	11	8	4	0	0	0	30
12.	JHARKHAND	3	1	6	8	6	0	0	24
13.	BIHAR	0	1	1	17	19	0	0	38
14.	UTTAR PRADESH	0	0	1	12	50	12	0	75
15.	UTTARAKHAND	0	0	1	2	10	0	0	13
16.	HARYANA	0	0	3	5	12	1	0	21
17.	CHANDIGARH (UT)	0	0	0	1	0	0	0	1
18.	DELHI	0	0	0	0	7	2	0	9
19.	PUNJAB	2	1	4	11	2	0	0	20
20.	HIMACHAL PRADESH	0	1	7	4	0	0	0	12
21.	JAMMU & KASHMIR(UT)	2	1	4	12	1	0	0	20
22.	LADAKH(UT)	0	0	0	1	1	0	0	2
23.	RAJASTHAN	0	0	2	10	21	0	0	33
24.	MADHYA PRADESH	0	2	9	16	24	0	0	51
25.	GUJARAT	4	4	10	6	9	0	0	33
26.	DADRA & NAGAR HAVELI (UT)	0	0	0	1	0	0	0	1
27.	DAMAN & DIU (UT)	0	0	1	1	0	0	0	2
28.	GOA	0	1	1	0	0	0	0	2
29.	MAHARASHTRA	9	5	10	9	2	0	1	36
30.	CHHATISGARH	6	6	6	9	0	0	0	27
31.	ANDHRA PRADESH	2	8	3	0	0	0	0	13
32.	TELANGANA	15	7	8	3	0	0	0	33
33.	TAMILNADU	0	10	22	5	0	0	0	37
34.	PUDUCHERRY (UT)	1	1	1	1	0	0	0	4
35.	KARNATAKA	2	8	16	4	0	0	0	30
36.	KERALA	0	0	7	7	0	0	0	14
37.	LAKSHADWEEP (UT)	0	0	1	0	0	0	0	1
	TOTAL	61	94	157	180	181	15	2	690
CATEG	ORYWISE DISTRIBUTION								
OF DIS	TRICTS OUT OF THE	9%	14%	23%	26%	26 %	2%		
688	WHOSE DATA RECEIVED								

STATEWISE DISTRIBUTION OF NO. OF DISTRICTS WITH EXCESS. NORMAL, DEFICIENT, SCANTY AND NO RAINFALL

PERCENT DISTRIBUTION OF DISTRICTS IN EARLIER YEARS SINCE 1st OCTOBER

DATE	LE	E	Ν	D	LD	NR	
31.12.2019	34%	21 %	20%	17 %	8%	0%	
31.12.2018	2%	3%	10%	24 %	41%	20%	
31.12.2017	9%	11%	19%	21 %	32%	8%	
31.12.2016	8%	7%	15%	28 %	38%	4%	
31.12.2015	0%	10%	9%	22%	51%	8%	

Source: Indian Meteorological Department



India Meteorological Department Hydromet Division, New Delhi

STATE-WISE RAINFALL DISTRIBUTION Week:31-12-2020 To 06-01-2021 Period:01-10-2020 To 31-12-2020

		000	CK.31-12-202	0 10 00-01-2	.021	1 01	00.01-10-202	0 10 31-12-2	.020
S NO	MET. SUBDIVISION/UT/STATE/DISTRI CT	ACTUAL (mm)	NORMAL (mm)	%DEP.	CAT.	ACTUAL (mm)	NORMAL (mm)	% DEP.	CAT.
REG	ION : EAST AND NORTH EAST IND	IA							
1	ARUNACHAL PRADESH	0.0	6.0	-100%	NR	247.0	267.4	-8%	N
2	ASSAM	0.0	2.0	-100%	NR	189.2	161.5	17%	N
3	MEGHALAYA	0.0	0.8	-100%	NR	310.6	328.0	-5%	N
4	NAGALAND	0.1	0.7	-92%	LD	198.6	160.8	23%	Е
5	MANIPUR	0.0	1.1	-100%	NR	188.9	226.4	-17%	N
6	MIZORAM	0.0	0.8	-100%	NR	226.7	264.1	-14%	N
7	TRIPURA	0.0	0.8	-100%	NR	254.3	221.8	15%	N
8	SIKKIM	0.0	6.5	-100%	NR	185.3	216.3	-14%	N
9	WEST BENGAL	0.0	2.2	-100%	NR	85.7	159.1	-46%	D
10	JHARKHAND	0.0	1.6	-100%	NR	67.5	90.3	-25%	D
11	BIHAR	0.0	1.5	-99%	LD	30.1	73.0	-59%	D
REG	ION : NORTH WEST INDIA								
1	UTTAR PRADESH	4.8	2.0	138%	LE	7.6	41.5	-82%	LD
2	UTTARAKHAND	19.5	6.0	225%	LE	17.8	60.5	-71%	LD
3	HARYANA	20.6	2.6	694%	LE	8.8	20.1	-56%	D
4	CHANDIGARH (UT)	5.9	4.0	47%	Е	32.2	55.5	-42%	D
5	DELHI (UT)	25.3	2.7	836%	LE	0.8	22.7	-96%	LD
6	PUNJAB	9.7	3.2	202%	LE	20.7	26.3	-21%	D
7	HIMACHAL PRADESH	27.7	12.8	116%	LE	77.9	91.6	-15%	Ν
8	JAMMU & KASHMIR (UT)	67.3	14.7	358%	LE	108.1	133.5	-19%	N
9	LADAKH (UT)	3.7	2.6	42%	Е	4.0	14.3	-72%	LD
10	RAJASTHAN	8.2	0.7	1078%	LE	6.2	17.9	-66%	LD
REG	ION : CENTRAL INDIA								
1	ODISHA	0.0	1.7	-100%	NR	166.6	131.3	27%	E
2	MADHYA PRADESH	1.2	1.8	-31%	D	28.5	53.7	-47%	D
3	GUJARAT	0.0	0.1	-86%	LD	31.1	28.5	9%	N
4	DADAR & NAGAR HAVELI (UT)	0.0	0.0	-100%	NR	34.2	54.8	-38%	D
5	DAMAN & DIU (UT)	0.0	0.0	-100%	NR	35.5	50.0	-29%	D
6	GOA	6.8	0.3	2169%	LE	231.9	202.9	14%	N
7	MAHARASHTRA	1.3	0.8	66%	LE	126.7	98.5	29%	E
8	CHHATTISGARH	0.0	1.3	-100%	NR	92.6	76.7	21%	E
REG	ON : SOUTH PENINSULA								
1	ANDAMAN & NICOBAR (UT)	9.3	20.2	-54%	D	858.5	675.8	27%	E
2	ANDHRA PRADESH	4.1	2.3	80%	LE	387.3	290.7	33%	E
3	TELANGANA	0.0	1.2	-100%	NR	179.5	123.3	46%	E
4	TAMIL NADU	39.7	4.4	803%	LE	474.9	448.0	6%	Ν
5	PUDUCHERRY (UT)	78.1	10.8	623%	LE	1178.9	895.6	32%	E
6	KARNATAKA	3.0	0.5	491%	LE	206.0	181.7	13%	N
7	KERALA	20.7	2.1	886%	LE	365.1	491.6	-26%	D
8	LAKSHADWEEP (UT)	33.1	6.2	433%	LE	294.0	321.8	-9%	N
	COUNTRY :	9.4	2.9	225%		124.6	123.8	1%	

CATEGORYWISE DISTRIBUTION OF NO.OF STATES

CATECODY	Week:31-12-2020 To 06-01-2021	Period:01-10-2020 To 31-12-2020		
CATEGORY	NO.OF STATES	NO.OF STATES		
Large Excess	16	0		
Excess	2	8		
Normal	0	14		
Deficient	2	10		
Large Deficient	3	5		
NoRain	14	0		
NoData	0	0		

Page - IV Note: "The rainfall values are rounded off upto one place of decimal"



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COASTAL AP and YANAM

TN PUDU and KARAIKAL

COASTAL KARNATAKA

TELANGANA

RAYALASEEMA

N. I. KARNATAKA

S. I. KARNATAKA

KERALA & MAHE

LAKSHADWEEP

COUNTRY

10

India Meteorological Department Hydromet Division, New Delhi

Week :31-12-2020 To 06-01-2021 Period:01-10-2020 To 31-12-2020 MET ACTUAL (mm) NORMAL ACTUAL NORMAL SUBDIVISION/UT/STATE/DISTRI %DEP CAT. % DEP. CAT. NO (mm) (mm) (mm) CT REGION : EAST AND NORTH 0.0 2.4 -99% 142.1 166.7 -15% EAST INDIA ARUNACHAL PRADESH 0.0 6.0 -100% NR 247.0 267.4 -8% N ASSAM & MEGHALAYA 0.0 -100% NR 215.0 196.5 9% N 1.8 NMMT 0.0 0.9 -99% ID 213.5 221.0 -3% N SHWB & SIKKIM 3.2 0.0 -100% NR 121.8 179.4 -32% GANGETIC WEST BENGAL 0.0 2.2 -100% NR 80.6 156.4 -48% D **JHARKHAND** 0.0 1.6 -100% NR 67.5 90.3 -25% D BIHAR LD -59% 0.0 1.5 -99% 30.1 73.0 **REGION : NORTH WEST INDIA** 22.6 5.2 335% 34.3 55.9 -39% ID EAST UTTAR PRADESH 0.3 1.7 -85% 9.1 47.7 -81% ID WEST UTTAR PRADESH 5.4 32.7 LD 11.4 2.2 419% LE -83% 19.5 LD UTTARAKHAND 6.0 225% LE 17.8 60.5 -71% HAR. CHD & DELHI 20.7 2.5 730% LE 8.6 20.2 -57% D PUNJAB 97 202% 207 26.3 -21% 32 LE 77.9 N HIMACHAL PRADESH 27.7 12.8 116% LE 91.6 -15% JAMMU & KASHMIR AND 67.3 14.7 358% LE 108.1 133.5 -19% Ν LADAKH WEST RAJASTHAN 0.7 416% LE -68% LD 3.6 3.8 11.6 I E LD EAST RAJASTHAN 14.1 0.6 2246% 9.2 25.8 -64% 84.9 76.0 **REGION : CENTRAL INDIA** 0.7 1.1 -32% 12% ODISHA NR 0.0 1.7 -100% 166.6 131.3 27% Е WEST MADHYA PRADESH 1.9 1.0 94% 21.3 50.9 -58% EAST MADHYA PRADESH -34% D 0.3 2.9 -89% 37.9 57.4 LD GUJARAT REGION 0.0 0.2 -85% LD 23.7 29.8 -21% SAURASHTRA & KUTCH 0.0 0.1 -100% NR 37.3 27.5 36% Е 0.9 0.3 195% 254.2 139.6 KONKAN & GOA 82% MADHYA MAHARASHTRA 3.0 0.2 1390% LE 170.0 103.1 65% LE MARATHWADA 0.9 0.6 45% Е 106.7 100.0 7% Ν -87% 52.0 -36% VIDARBHA 0.2 1.6 LD 81.5 CHHATTISGARH 0.0 1.3 -100% NR 92.6 76.7 21% Е 11.3 **REGION : SOUTH PENINSULA** 319.4 15% 2.3 393% 277.1 A & N ISLAND 9.3 20.2 -54% 858.5 675.8 27% Е 338.1

SUBDIVISION-WISE RAINFALL DISTRIBUTION

2.9 CATEGORYWISE NO.OF SUBDIVISIONS AND % AREA(SUBDIVISIONAL)OF THE COUNTRY

3.2

1.2

0.8

4.4

0.3

0.7

0.5

2.2

6.2

26%

-100%

435%

807%

2798%

44%

595%

841%

433%

225%

Е

NR

LE

LE

Е

LE

LE

LE

419.3

179.5

343.2

477.5

332.8

179.8

203.0

365.1

294.0

124.6

123.3

223.3

449.7

256.8

138.1

204.1

491.6

321.8

123.8

4.0

0.0

4.3

39.9

8.7

1.0

3.5

20.7

33.1

9.4

	Week :31-	12-2020 To 06-01-2021	Period:01-10-2020 To 31-12-2020			
CATEGORY	NO.OF SUBDIVISIONS	NO.OF SUBDIVISIONAL %AREA OF COUNTRY NO.OF SUBDIVISI		SUBDIVISIONAL %AREA OF COUNTRY		
Large Excess	17	47%	2	5%		
Excess	3	7%	9	24%		
Normal	0	0%	9	25%		
Deficient	1	0%	11	27%		
Large Deficient	6	19%	5	19%		
NoRain	9	27%	0	0%		

Note: "The rainfall values are rounded off upto one place of decimal"

24%

46%

54%

6%

30%

30%

-1%

-26%

-9%

1%

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Attachments:

No Attachments.