

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 1133
TO BE ANSWERED ON FRIDAY, NOVEMBER 22, 2019**

WEATHER FORECASTING ASSISTANCE TO PEOPLE

**1133. SHRI GAJANAN KIRTIKAR:
SHRI SANJAY SADASHIV RAO MANDLIK:
SHRI SUDHEER GUPTA:
SHRI BIDYUT BARAN MAHATO:
SHRI PRATAPRAO JADHAV :**

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has taken note that some parts of the country including Kerala, North Karnataka, Madhya Pradesh, Maharashtra, Assam, North Bihar, Eastern UP, South Gujarat have received extreme rainfall leading to the condition of floods while some other parts received deficient rainfall leading to drought like conditions and if so, the details thereof;**
- (b) whether the Government has assessed the gravity of the situation caused due to vagaries of climate and extended any assistance to the affected States and if so, the details thereof;**
- (c) whether Indian Meteorological Department (IMD) has conducted any research to study the reasons for extreme rainfall and drought conditions in the various parts of the country;**
- (d) if so, the details thereof and the outcome thereto; and**
- (e) whether the Government/IMD proposes to devise a mechanism where farmers/people are being provided with meteorological assistance to predict rainfall or drought in different parts of the country to save agriculture and human life and if so, the details thereof?**

**ANSWER
MINISTER FOR SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(DR. HARSH VARDHAN)**

- (a) Yes Sir. Monsoon rainfall varies on different spatial and temporal scales. Extreme rainfall events that occur at some places and some other parts receiving deficient rainfall are part of the natural variability of the Indian monsoon system itself. India Meteorological Department (IMD) issues rainfall forecasts and associated warnings well in advance to entire country. The district wise rainfall activity (in all categories) for the entire country during the Monsoon Season 2019 is attached as Annexure.**

(b) India Meteorological Department (IMD) through its State Meteorological Centres issues forecasts & warnings for the impending adverse weather (district-wise) as and when required to support the mitigation measures.

(c) & (d) IMD is mainly associated with the operational weather forecasting services for the country. However, the research institutions such as Indian Institute of Tropical Meteorology (IITM), Pune and National Centre for Medium Range Weather Forecasting (NCMRWF), Noida under the Ministry of Earth Sciences are conducting research studies in relation to the extreme weather events which help to further improve the operational forecasting services of IMD.

Such research studies carried out by these institutions have brought out that global warming is one of the main reasons for the increasing trend in the occurrence of extreme weather events. The studies have also brought out that : (i) the frequency of very light rain and light to moderate rain events during the monsoon season has decreased over most parts of the country (ii) frequency of very heavy and extreme rainfall events over northern parts of the country has increased significantly, and (iii) during the period, 1901-2010, heavy rainfall events (rainfall exceeding 15 cm in 24 hours) over northern parts of the country show an increasing trend of about 6% per decade.

(e) India Meteorological Department (IMD) runs an operational Agrometeorological Advisory Service (AAS) viz., Gramin Krishi Mausam Sewa (GKMS) scheme for the benefit of farming community in the country. Under the scheme, medium range weather forecast at district level is generated and issued. Based on the forecast, Agromet Advisories are being prepared and communicated by the 130 Agromet Field Units (AMFUs) located at State Agricultural Universities, institutes of Indian Council of Agricultural Research (ICAR) and IIT etc., to the farmers on every Tuesday and Friday to take decision on day-to-day agricultural operations. AAS rendered by IMD is a step towards weather-based crop and livestock management strategies and operations dedicated to enhancing crop production and food security besides reducing crop damage and loss due to unusual weather.

Agromet Advisories are communicated to the farming community through multichannel dissemination system like print and electronic media, DoorDarshan, radio, internet etc. including SMS using mobile phones through Kisan Portal launched by Ministry of Agriculture and Farmers' Welfare and also through private companies under Public Private Partnership (PPP) mode. At present, 42 million farmers in the country receive the Agromet Advisories through SMS directly.

In addition, IMD in collaboration with Central Research Institute for Dryland Agriculture (CRIDA) is continuously issuing Agromet Advisories using Extended Range Forecast (ERF) throughout the season particularly during prolonged dry spell / poor rainfall situation for farmers and other users.

Annexure

CATEGORY	
LE	(LARGE EXCESS) (+60% or more)
E	(EXCESS) (+20% to +59%)
N	(NORMAL) (+19% to -19%)
D	(DEFICIENT) (-20% to -59%)
LD	(LARGE DEFICIENT) (-60% to -99%)
NR	(NO RAIN) -100%

DISTRICTWISE RAINFALL DISTRIBUTION					
S.No.	MET. SUBDIVISION/ UT	PERIOD : 01.06.2019 TO 30.09.2019			CATEGORY
	STATE/DISTRICT (NAME)	ACTUAL (mm)	NORMAL (mm)	% DEPARTURE	
1	A & N ISLAND	2331.3	1653.8	41%	E
1	NICOBAR	1124.2	1129.3	0%	N
2	NORTH & MIDDLE ANDAMAN	3283.3	1820.4	80%	LE
3	SOUTH ANDAMAN	2038.3	1796.1	13%	N
2	ARUNACHAL PRADESH	1538.2	1726.6	-11%	N
1	ANJAW	1079.0	1566.2	-31%	D
2	CHANGLANG	1296.0	1547.4	-16%	N
3	DIBANG VALLEY	1300.8	1281.1	2%	N
4	EAST KAMENG	872.0	1313.9	-34%	D
5	EAST SIANG	2741.3	3187.2	-14%	N
6	KURUNG KUMEY	1492.4	1256.1	19%	N
7	LOHIT	1680.5	1560.0	8%	N
8	LOWER DIBANG VALLEY	2797.0	1699.9	65%	LE
9	LOWER SUBANSIRI	829.2	799.7	4%	N
10	PAPUMPORA	2007.5	2213.5	-9%	N
11	TAWANG	831.3	1796.1	-54%	D
12	TIRAP	1184.1	2309.5	-49%	D
13	UPPER SIANG	1736.5	1877.3	-8%	N
14	UPPER SUBANSIRI	1018.6	980.6	4%	N
15	WEST KAMENG	1122.0	1796.1	-38%	D
16	WEST SIANG	2019.2	2045.5	-1%	N
3	ASSAM & MEGHALAYA	1567.9	1773.7	-12%	N
	ASSAM	1334.3	1486.2	-10%	N
1	BAKSA	1824.5	1226.6	49%	E
2	BARPETA	2285.4	2381.0	-4%	N
3	BONGAIGAON	2493.6	2309.8	8%	N
4	CACHAR	1788.8	1867.4	-4%	N
5	CHIRANG	2682.9	2291.7	17%	N
6	DARRANG	368.9	1257.1	-71%	LD
7	DHEMAJI	2315.8	1820.6	27%	E
8	DHUBRI	1664.6	2140.1	-22%	D
9	DIBRUGARH	1323.2	1611.6	-18%	N
10	GOALPARA	1756.3	1818.8	-3%	N
11	GOLAGHAT	934.8	1079.3	-13%	N
12	HAILAKANDI	1490.0	1554.4	-4%	N
13	JORHAT	1172.5	1276.0	-8%	N
14	KAMRUP (RURAL)	940.1	1302.3	-28%	D
15	KAMRUP METRO.	926.2	978.6	-5%	N
16	KARBI ANGLONG	487.7	862.4	-43%	D
17	KARIMGANJ	1878.9	2186.7	-14%	N
18	KOKRAJHAR	3050.3	2705.9	13%	N
19	LAKHIMPUR	2066.2	2002.9	3%	N
20	MORIGAON	740.9	1148.4	-35%	D
21	N. C. HILLS	868.4	1085.7	-20%	D
22	NAGAON	668.3	1013.1	-34%	D

23	NALBARI	1793.0	1586.7	13%	N
24	SHONITPUR	1172.3	1164.5	1%	N
25	SIBSAGAR	881.6	1191.2	-26%	D

26	TINSUKIA	1362.6	1516.9	-10%	N
27	UDALGURI	1651.7	1408.2	17%	N
	MEGHALAYA	2431.8	2855.8	-15%	N
1	EAST GARO HILLS	2801.6	1671.0	68%	LE
2	EAST KHASI HILLS	5425.0	4521.8	20%	E
3	JAINTIA HILLS	2537.5	4959.2	-49%	D
4	RI-BHOI	1275.1	1452.7	-12%	N
5	SOUTH GARO HILLS	2333.5	1893.7	23%	E
6	WEST GARO HILLS	1255.6	1893.7	-34%	D
7	WEST KHASI HILLS	1992.9	2695.1	-26%	D
4	NMMT	1114.8	1426.7	-22%	D
	NAGALAND	991.8	1143.4	-13%	N
1	DIMAPUR	837.5	1265.4	-34%	D
2	KEPHIRE	512.3	618.7	-17%	N
3	KOHIMA	988.6	1265.4	-22%	D
4	LONGLENG	736.8	1386.1	-47%	D
5	MOKOKCHUNG	1218.9	1386.1	-12%	N
6	MON	1038.7	1025.0	1%	N
7	PAREN	1157.1	893.8	29%	E
8	PHEK	640.3	801.8	-20%	D
9	TUENSANG	1282.3	1386.1	-7%	N
10	WOKHA	962.7	1470.2	-35%	D
11	ZUNHEBOTO	861.0	1386.1	-38%	D
	MANIPUR	620.8	1404.9	-56%	D
1	BISHNUPUR	524.3	1365.2	-62%	LD
2	CHANDEL	352.5	2004.6	-82%	LD
3	CHURACHANDPUR	673.4	1562.3	-57%	D
4	IMPHAL EAST	506.6	1254.8	-60%	LD
5	IMPHAL WEST	807.0	888.8	-9%	N
6	SENAPATI	716.5	1266.9	-43%	D
7	TAMENGLONG	1510.7	6852.4	-78%	LD
8	THOUBAL	409.4	856.9	-52%	D
9	UKHRUL	725.8	1056.9	-31%	D
	MIZORAM	1506.9	1655.9	-9%	N
1	AIZWAL	1294.7	1625.1	-20%	D
2	CHAMPHAI	1113.5	1385.6	-20%	D
4	KOLASIB	1885.7	1774.4	6%	N
5	LAWNGTLAI	1873.9	1712.3	9%	N
6	LUNGLEI	2121.2	1803.2	18%	N
7	MAMIT	1002.2	1665.5	-40%	D
8	SAIHA	1606.7	1759.3	-9%	N
9	SERCHHIP	877.9	1523.9	-42%	D
	TRIPURA	1382.9	1457.8	-5%	N
1	DHALAI	1523.5	1406.4	8%	N
2	NORTH TRIPURA	1455.1	1491.9	-2%	N
3	SOUTH TRIPURA	1341.6	1608.7	-17%	N
4	WEST TRIPURA	1226.3	1360.5	-10%	N
5	SHWB & SIKKIM	1884.1	1970.8	-4%	N
	SIKKIM	1954.0	1606.8	22%	E
1	EAST SIKKIM	1743.3	1764.5	-1%	N
2	NORTH SIKKIM	2244.1	1492.8	50%	E
3	SOUTH SIKKIM	1353.3	2072.9	-35%	D
4	WEST SIKKIM	1461.5	1591.3	-8%	N

	WEST BENGAL	1167.6	1405.0	-17%	N
1	COOCH BEHAR	2072.1	2573.6	-19%	N
2	DARJEELING	2340.3	2474.9	-5%	N
3	JALPAIGURI	2854.3	2839.0	1%	N
4	MALDA	927.8	1112.3	-17%	N
5	NORTH DINAJPUR	990.8	1500.8	-34%	D
6	SOUTH DINAJPUR	876.8	1172.6	-25%	D
6	GANGETIC WEST BENGAL	940.9	1181.5	-20%	D
1	BANKURA	919.2	1158.2	-21%	D
2	BIRBHUM	772.4	1172.7	-34%	D
3	BURDWAN	739.1	998.3	-26%	D
4	EAST MIDNAPORE	1138.0	1305.7	-13%	N
5	HOOGHLY	750.2	1047.0	-28%	D
6	HOWRAH	616.9	1196.8	-48%	D
7	KOLKATA	1187.0	1326.1	-10%	N
8	MURSHIDABAD	569.9	1066.5	-47%	D
9	NADIA	713.1	897.9	-21%	D
10	NORTH 24 PARGANAS	1069.9	1269.2	-16%	N
11	PURULIA	1006.4	1094.6	-8%	N
12	SOUTH 24 PARGANAS	1207.0	1504.0	-20%	D
13	WEST MIDNAPORE	1124.9	1184.5	-5%	N
7	ODISHA	1232.5	1155.3	7%	N
1	ANGUL	968.5	1098.5	-12%	N
2	BALASORE	1006.0	1245.1	-19%	N
3	BARGARH	1417.7	1182.4	20%	E
4	BHADRAK	1059.3	1051.6	1%	N
5	BOLANGIR	1383.0	1180.4	17%	N
6	BOUDHGARH	1332.7	1098.6	21%	E
7	CUTTACK	1281.0	1196.7	7%	N
8	DEOGARH	1076.8	1284.9	-16%	N
9	DHENKANAL	1168.2	1111.6	5%	N
10	GAJAPATI	881.9	995.2	-11%	N
11	GANJAM	1085.8	879.9	23%	E
12	JAGATSINGHPUR	1277.2	1112.0	15%	N
13	JAJPUR	1242.6	1421.1	-13%	N
14	JHARSUGUDA	1537.8	1152.7	33%	E
15	KALAHANDI	1365.7	1225.8	11%	N
16	KANDHAMAL	1370.4	1216.4	13%	N
17	KENDRAPARA	1084.6	1110.0	-2%	N
18	KEONJHARGARH	1014.6	1131.9	-10%	N
19	KHURDA	1176.1	1116.9	5%	N
20	KORAPUT	1633.5	1219.8	34%	E
21	MALKANGIRI	1398.3	1221.7	14%	N
22	MAYURBHANJ	1163.7	1253.1	-7%	N
23	NAWAPARA	1034.8	999.3	4%	N
24	NAWARANGPUR	1392.9	1346.8	3%	N
25	NAYAGARH	1257.4	1103.8	14%	N
26	PURI	1280.9	1014.7	26%	E
27	RAYAGADA	1070.2	978.2	9%	N
28	SAMBALPUR	1291.5	1284.9	1%	N
29	SONEPUR	1500.2	1239.9	21%	E
30	SUNDARGARH	1137.9	1144.7	-1%	N
8	JHARKHAND	865.6	1054.7	-18%	N
1	BOKARO	840.9	1019.3	-18%	N
2	CHATRA	696.3	976.1	-29%	D
3	DEOGHAR	759.0	1021.8	-26%	D
4	DHANBAD	939.2	1101.0	-15%	N
5	DUMKA	993.0	1072.3	-7%	N
6	EAST SINGBHUM	1146.0	1084.8	6%	N
7	GARHWA	450.0	946.7	-52%	D
8	GIRIDIH	810.4	984.2	-18%	N

9	GODDA	541.4	962.2	-44%	D
10	GUMLA	960.2	1122.1	-14%	N
11	HAZARIBAG	911.5	1072.8	-15%	N
12	JAMTARA	1004.7	1121.0	-10%	N
13	KHUNTI	726.7	1182.1	-39%	D
14	KODERMA	900.9	875.9	3%	N
15	LATEHAR	636.7	1038.2	-39%	D
16	LOHARDAGA	869.4	971.9	-11%	N
17	PAKUR	732.9	1267.3	-42%	D
18	PALAMU	871.1	886.2	-2%	N
19	RAMGARH	968.5	1027.8	-6%	N
20	RANCHI	756.7	1074.6	-30%	D
21	SAHIBGANJ	1893.6	1301.3	46%	E
22	SERAIKELA-KHARSAWAN	777.7	1053.2	-26%	D
23	SIMDEGA	1253.1	1298.7	-4%	N
24	WEST SINGBHUM	885.3	1025.7	-14%	N
9	BIHAR	1050.4	1017.2	3%	N
1	ARARIA	1414.5	1333.4	6%	N
2	ARWAL	511.6	751.1	-32%	D
3	AURANGABAD	854.3	854.8	0%	N
4	BANKA	823.3	912.1	-10%	N
5	BEGUSARAI	769.1	1046.3	-26%	D
6	BHABUA	1065.2	927.4	15%	N
7	BHAGALPUR	1073.2	972.3	10%	N
8	BHOJPUR	863.6	925.7	-7%	N
9	BUXAR	1084.2	828.9	31%	E
10	DARBHANGA	976.7	891.2	10%	N
11	EAST CHAMPARAN	1155.3	1056.4	9%	N
12	GAYA	849.0	857.8	-1%	N
13	GOPALGANJ	1367.5	975.4	40%	E
14	JAHANABAD	835.3	818.7	2%	N
15	JAMUI	812.6	930.0	-13%	N
16	KATIHAR	1022.7	1106.4	-8%	N
17	KHAGARIA	975.5	994.5	-2%	N
18	KISHANGANJ	1738.2	1786.2	-3%	N
19	LAKHISARAI	711.2	845.7	-16%	N
20	MADHEPURA	1280.2	1118.5	14%	N
21	MADHUBANI	1008.0	975.9	3%	N
22	MONGHYR	848.2	1024.2	-17%	N
23	MUZAFFARPUR	1081.6	998.8	8%	N
24	NALANDA	955.0	862.3	11%	N
25	NAWADA	916.8	841.5	9%	N
26	PATNA	860.3	920.7	-7%	N
27	PURNEA	1325.5	1462.3	-9%	N
28	ROHTAS	781.9	863.8	-9%	N
29	SAHARSA	1028.2	1257.2	-18%	N
30	SAMASTIPUR	1304.6	975.6	34%	E
31	SARAN	983.2	933.1	5%	N
32	SHEIKHPURA	617.8	844.1	-27%	D
33	SHEOHAR	1013.0	1042.4	-3%	N
34	SITAMARHI	1068.9	1061.4	1%	N
35	SIWAN	1273.3	967.1	32%	E
36	SUPAUL	1313.2	1092.5	20%	E
37	VAISHALI	978.1	959.3	2%	N
38	WEST CHAMPARAN	1434.1	1277.4	12%	N
	UTTAR PRADESH	718.0	790.2	-9%	N
10	EAST UTTAR PRADESH	846.7	839.4	1%	N
1	ALLAHABAD	989.3	798.9	24%	E
2	AMBEDKAR NAGAR	1234.4	859.0	44%	E
3	AMETHI	805.9	732.8	10%	N
4	AZAMGARH	860.3	885.5	-3%	N
5	BAHRAICH	1091.1	1010.0	8%	N

6	BALLIA	1117.5	789.4	42%	E
7	BALRAMPUR	1027.7	898.6	14%	N
8	BANDA	954.8	843.9	13%	N
9	BARABANKI	1230.8	857.8	43%	E
10	BASTI	1284.1	833.2	54%	E
11	CHANDAULI	738.4	758.1	-3%	N
12	CHITRAKOOT	838.3	762.4	10%	N
13	DEORIA	814.8	874.1	-7%	N
14	FAIZABAD	998.7	910.4	10%	N
15	FARRUKHABAD	479.4	749.6	-36%	D
16	FATEHPUR	568.4	775.1	-27%	D
17	GHAZIPUR	899.7	817.1	10%	N
18	GONDA	864.2	934.9	-8%	N
19	GORAKHPUR	1256.6	1216.5	3%	N
20	HARDOI	602.9	713.9	-16%	N
21	JAUNPUR	692.9	808.2	-14%	N
22	KANNAUJ	732.7	695.1	5%	N
23	KANPUR CITY	624.1	617.9	1%	N
24	KANPUR DEHAT	274.6	672.2	-59%	D
25	KAUSHAMBI	669.2	614.2	9%	N
26	KHERI	541.7	959.7	-44%	D
27	KUSHI NAGAR	696.8	895.8	-22%	D
28	LUCKNOW	856.7	704.4	22%	E
29	MAHARAJGANJ	698.8	1121.9	-38%	D
30	MAU	627.1	834.9	-25%	D
31	MIRZAPUR	1370.0	850.3	61%	LE
32	PRATAPGARH	1109.5	775.4	43%	E
33	RAE BAREILLY	520.7	574.5	-9%	N
34	SANT KABIR NAGAR	957.0	993.1	-4%	N
35	SANT RAVIDAS NAGAR	1216.7	758.1	60%	LE
36	SHRAWASTI NAGAR	1258.7	1010.0	25%	E
37	SIDDHARTH NAGAR	966.9	1073.1	-10%	N
38	SITAPUR	574.6	847.0	-32%	D
39	SONBHADRA	931.1	831.0	12%	N
40	SULTANPUR	886.5	852.6	4%	N
41	UNNAO	549.1	738.8	-26%	D
42	VARANASI	1046.1	884.3	18%	N
11	WEST UTTAR PRADESH	527.4	721.3	-27%	D
1	AGRA	497.8	587.9	-15%	N
2	ALIGARH	372.4	615.9	-40%	D
3	AURAIYA	488.3	578.4	-16%	N
4	BADAUN	389.8	754.3	-48%	D
5	BAGHPAT	310.4	560.2	-45%	D
6	BAREILLY	819.0	810.4	1%	N
7	BIJNOR	802.4	935.7	-14%	N
8	BULANDSHAHR	311.1	602.8	-48%	D
9	ETAH	545.8	537.1	2%	N
10	ETAWAH	466.3	614.1	-24%	D
11	FIROZABAD	436.1	629.0	-31%	D
12	GAUTAM BUDDHA NAGAR	414.0	544.8	-24%	D
13	GHAZIABAD	146.1	544.8	-73%	LD
14	HAMIRPUR	917.0	723.1	27%	E
15	HAPUR	396.0	730.4	-46%	D
16	JALAUN	594.5	726.1	-18%	N
17	JHANSI	610.1	757.6	-19%	N
18	JYOTIBA PHULE NAGAR	406.3	850.0	-52%	D
19	KANSHIRAM NAGAR	588.3	688.4	-15%	N
20	LALITPUR	892.4	831.0	7%	N
21	MAHAMAYA NAGAR	470.6	559.2	-16%	N
22	MAHOBA	518.2	675.3	-23%	D
23	MAINPURI	347.2	669.4	-48%	D
24	MATHURA	303.2	538.5	-44%	D
25	MEERUT	496.0	743.4	-33%	D
26	MORADABAD	689.4	852.6	-19%	N

27	MUZAFFARNAGAR	555.7	725.6	-23%	D
28	PILIBHIT	371.9	926.2	-60%	LD
29	RAMPUR	468.7	827.7	-43%	D
30	SAHARANPUR	547.3	782.3	-30%	D
31	SAMBHAL	492.5	701.7	-30%	D
32	SHAHJAHANPUR	660.5	837.1	-21%	D
33	SHAMLI	170.0	614.0	-72%	LD
12	UTTARAKHAND	960.4	1176.9	-18%	N
1	ALMORA	700.4	842.7	-17%	N
2	BAGESHWAR	1204.5	842.7	43%	E
3	CHAMOLI	840.9	776.0	8%	N
4	CHAMPAWAT	1051.2	1338.0	-21%	D
5	DEHRADUN	1092.0	1524.6	-28%	D
6	GARHWAL PAURI	711.7	1225.1	-42%	D
7	GARHWAL TEHRI	612.6	990.2	-38%	D
8	HARDWAR	697.2	971.2	-28%	D
9	NAINITAL	1287.8	1425.0	-10%	N
10	PITHORAGARH	1411.3	1544.9	-9%	N
11	RUDRAPRAYAG	1260.6	1484.5	-15%	N
12	UDHAM SINGH NAGAR	962.0	1073.6	-10%	N
13	UTTARKASHI	769.5	1208.4	-36%	D
13	HAR. CHD & DELHI	258.6	444.0	-42%	D
	HARYANA	255.2	438.6	-42%	D
1	AMBALA	628.1	850.4	-26%	D
2	BHIWANI	182.5	334.4	-45%	D
3	FARIDABAD	339.9	578.6	-41%	D
4	FATEHABAD	102.7	277.3	-63%	LD
5	GURGAON	284.7	503.3	-43%	D
6	HISAR	159.8	309.6	-48%	D
7	JHAJJAR	162.3	376.4	-57%	D
8	JIND	197.2	401.0	-51%	D
9	KAITHAL	172.3	345.8	-50%	D
10	KARNAL	418.3	546.0	-23%	D
11	KURUKSHETRA	383.5	499.6	-23%	D
12	MAHENDRAGARH	207.7	407.8	-49%	D
13	MEWAT	273.6	504.3	-46%	D
14	PALWAL	250.8	426.6	-41%	D
15	PANCHKULA	397.9	925.0	-57%	D
16	PANIPAT	184.3	480.1	-62%	LD
17	REWARI	318.6	432.1	-26%	D
18	ROHTAK	141.7	502.0	-72%	LD
19	SIRSA	182.9	211.3	-13%	N
20	SONEPAT	228.3	524.2	-56%	D
21	YAMUNA NAGAR	700.5	822.9	-15%	N
	CHANDIGARH (UT)	716.4	846.5	-15%	N
	DELHI	378.1	585.8	-35%	D
1	CENTRAL DELHI		674.9		*
2	EAST DELHI	317.4	674.9	-53%	D
3	NEW DELHI	300.2	517.7	-42%	D
4	NORTH DELHI	528.1	590.8	-11%	N
5	NORTH EAST DELHI	345.5	674.9	-49%	D
6	NORTH WEST DELHI		488.8		*
7	SOUTH DELHI	454.3	674.9	-33%	D
8	SOUTH WEST DELHI	331.7	596.6	-44%	D
9	WEST DELHI		621.7		*
14	PUNJAB	444.3	467.3	-5%	N
1	AMRITSAR	345.0	506.9	-32%	D
2	BARNALA	275.0	368.8	-25%	D

3	BHATINDA	380.9	318.0	20%	E
4	FARIDKOT	275.8	300.6	-8%	N
5	FATEHGARH SAHIB	453.5	509.7	-11%	N
6	FEROZEPUR	155.0	310.0	-50%	D
7	GURDASPUR	901.2	836.9	8%	N
8	HOSHIARPUR	583.3	674.8	-14%	N
9	JALANDHAR	414.2	575.1	-28%	D
10	KAPURTHALA	820.9	360.7	128%	LE
11	LUDHIANA	552.1	486.2	14%	N
12	MANSA	218.9	301.1	-27%	D
13	MOGA	242.6	326.9	-26%	D
14	MUKTSAR	380.9	303.5	25%	E
15	NAWANSHAHR	777.7	764.5	2%	N
16	PATIALA	780.4	563.1	39%	E
17	ROPAR	834.1	706.2	18%	N
18	SANGRUR	265.1	414.2	-36%	D
19	SAS NAGAR (MOHALI)	559.5	572.3	-2%	N
20	TARN TARAN	318.5	315.1	1%	N
15	HIMACHAL PRADESH	684.2	763.5	-10%	N
1	BILASPUR	1099.5	873.9	26%	E
2	CHAMBA	573.4	1051.8	-45%	D
3	HAMIRPUR	1154.0	1019.0	13%	N
4	KANGRA	1309.3	1595.9	-18%	N
5	KINNAUR	120.4	251.7	-52%	D
6	KULLU	562.0	504.1	11%	N
7	LAHAUL & SPITI	175.0	394.7	-56%	D
8	MANDI	934.4	1061.9	-12%	N
9	SHIMLA	681.5	643.6	6%	N
10	SIRMAUR	1144.5	1350.1	-15%	N
11	SOLAN	841.7	983.1	-14%	N
12	UNA	871.7	820.2	6%	N
16	JAMMU & KASHMIR	445.8	567.5	-21%	D
1	ANANTNAG	204.7	296.9	-31%	D
2	BADGAM	135.7	185.4	-27%	D
3	BANDIPORE	137.0	168.7	-19%	N
4	BARAMULA	381.0	234.9	62%	LE
5	DODA	309.8	435.9	-29%	D
6	GANDERBAL	170.7	293.7	-42%	D
7	JAMMU	360.1	931.3	-61%	LD
8	KARGIL	21.1	37.7	-44%	D
9	KATHUA	705.5	1362.9	-48%	D
10	KISTWAR		435.9		*
11	KULGAM	388.0	330.0	18%	N
12	KUPWARA	188.7	262.9	-28%	D
13	LADAKH (LEH)	17.8	37.7	-53%	D
14	POONCH	509.0	725.4	-30%	D
15	PULWAMA	85.3	151.9	-44%	D
16	RAJOURI	283.7	830.7	-66%	LD
17	RAMBAN	375.8	413.8	-9%	N
18	REASI	1717.0	1154.3	49%	E
19	SAMBA	689.0	931.3	-26%	D
20	SHOPIAN		265.8		*
21	SRINAGAR	215.1	205.9	4%	N
22	UDHAMPUR	992.0	1342.7	-26%	D
	RAJASTHAN	582.6	415.0	40%	E
17	EAST RAJASTHAN	919.5	602.9	53%	E
1	AJMER	764.3	419.5	82%	LE
2	ALWAR	373.8	553.5	-32%	D
3	BANSWARA	1223.7	844.6	45%	E
4	BARAN	1237.4	774.5	60%	LE

5	BHARATPUR	486.4	545.2	-11%	N
6	BHILWARA	1055.4	580.4	82%	LE
7	BUNDI	1169.0	629.7	86%	LE
8	CHITTORGARH	1177.2	699.2	68%	LE
9	DAUSA	647.1	585.9	10%	N
10	DHOLPUR	692.2	605.2	14%	N
11	DUNGARPUR	1007.2	624.6	61%	LE
12	JAIPUR	695.5	502.1	39%	E
13	JHALAWAR	1716.6	841.2	104%	LE
14	JHUNJHUNU	598.5	406.1	47%	E
15	KARAULI	524.2	616.9	-15%	N
16	KOTA	1299.0	716.6	81%	LE
17	PRATAPGARH	1662.8	864.1	92%	LE
18	RAJSAMAND	841.7	506.0	66%	LE
19	SAWAI MADHOPUR	926.6	617.4	50%	E
20	SIKAR	685.3	391.2	75%	LE
21	SIROHI	952.1	839.0	13%	N
22	TONK	836.8	557.0	50%	E
23	UDAIPUR	976.1	587.4	66%	LE
18	WEST RAJASTHAN	315.0	265.3	19%	N
1	BARMER	283.6	247.9	14%	N
2	BIKANER	200.5	229.6	-13%	N
3	CHURU	353.1	315.5	12%	N
4	HANUMANGARH	150.3	263.5	-43%	D
5	JAISALMER	160.7	162.1	-1%	N
6	JALORE	514.6	385.7	33%	E
7	JODHPUR	403.0	278.1	45%	E
8	NAGOUR	532.1	350.5	52%	E
9	PALI	694.8	450.3	54%	E
10	SRI GANGANAGAR	147.8	201.8	-27%	D
	MADHYA PRADESH	1351.1	940.6	44%	E
19	EAST MADHYA PRADESH	1309.7	1048.4	25%	E
1	ANUPPUR	1342.3	1099.6	22%	E
2	BALAGHAT	1284.1	1323.0	-3%	N
3	CHHATARPUR	1205.1	947.5	27%	E
4	CHHINDWARA	1275.3	1001.3	27%	E
5	DAMOH	1489.0	1046.3	42%	E
6	DINDORI	1453.4	1182.0	23%	E
7	JABALPUR	1587.0	1111.2	43%	E
8	KATNI	1283.0	1011.9	27%	E
9	MANDLA	1747.2	1210.7	44%	E
10	NARSINGHPUR	1719.4	1046.6	64%	LE
11	PANNA	1115.5	1087.4	3%	N
12	REWA	1199.2	950.7	26%	E
13	SAGAR	1519.9	1080.2	41%	E
14	SATNA	903.0	949.2	-5%	N
15	SEONI	1474.7	1027.0	44%	E
16	SHAHDOL	869.0	989.5	-12%	N
17	SIDHI	916.0	987.5	-7%	N
18	SINGRAULI	1211.3	837.0	45%	E
19	TIKAMGARH	1053.0	889.2	18%	N
20	UMARIA	1334.2	1075.0	24%	E
20	WEST MADHYA PRADESH	1383.0	857.7	61%	LE
1	AGAR-MALWA	1855.0	812.1	128%	LE
2	ALIRAJPUR	1394.5	784.3	78%	LE
3	ASHOKNAGAR	1366.5	852.1	60%	LE
4	BARWANI	1138.2	658.7	73%	LE
5	BETUL	1250.9	957.8	31%	E
6	BHIND	734.2	657.7	12%	N
7	BHOPAL	1756.5	962.4	83%	LE

8	BURHANPUR	1206.3	741.4	63%	LE
9	DATIA	719.9	755.8	-5%	N
10	DEWAS	1465.2	904.4	62%	LE
11	DHAR	1217.2	835.9	46%	E
12	GUNA	1557.2	888.1	75%	LE
13	GWALIOR	823.0	747.9	10%	N
14	HARDA	1591.5	1042.1	53%	E
15	HOSHANGABAD	1934.1	1308.7	48%	E
16	INDORE	1434.6	827.0	73%	LE
17	JHABUA	1424.7	774.7	84%	LE
18	KHANDWA	1311.3	790.9	66%	LE
19	KHARGONE	1016.5	714.4	42%	E
20	MANDSAUR	2018.6	786.5	157%	LE
21	MORENA	731.1	651.5	12%	N
22	NEEMUCH	1711.7	742.3	131%	LE
23	RAISEN	1863.2	1074.9	73%	LE
24	RAJGARH	1631.0	833.2	96%	LE
25	RATLAM	1563.5	867.5	80%	LE
26	SEHORE	1774.4	1043.3	70%	LE
27	SHAJAPUR	1712.9	886.7	93%	LE
28	SHEOPUR	849.2	670.7	27%	E
29	SHIVPURI	895.0	779.8	15%	N
30	UJJAIN	1477.3	844.3	75%	LE
31	VIDISHA	1603.8	982.2	63%	LE
	GUJARAT	993.3	692.4	43%	E
21	GUJARAT REGION	1193.4	922.9	29%	E
1	AHMEDABAD	725.9	692.2	5%	N
2	ANAND	1004.2	786.8	28%	E
3	ARAVALLI	998.2	817.6	22%	E
4	BANASKANTHA	599.8	559.1	7%	N
5	BHARUCH	1238.6	763.9	62%	LE
6	CHHOTA UDEPUR	1759.2	1015.7	73%	LE
7	DADARA & NAGAR HAVELI	3622.8	2161.9	68%	LE
8	DAHOD	848.5	808.0	5%	N
9	DAMAN	2916.8	2161.9	35%	E
10	DANGS	3039.3	2229.8	36%	E
11	GANDHINAGAR	847.6	714.7	19%	N
12	KHEDA	1013.2	838.0	21%	E
13	MAHISAGAR	881.3	786.3	12%	N
14	MEHSANA	737.5	687.4	7%	N
15	NARMADA	1600.9	1081.0	48%	E
16	NAVSARI	2363.8	1834.0	29%	E
17	PANCHMAHAL	1218.6	920.2	32%	E
18	PATAN	663.2	505.5	31%	E
19	SABARKANTHA	935.3	777.4	20%	E
20	SURAT	1858.2	1309.5	42%	E
21	TAPI	1759.4	1424.4	24%	E
22	VADODARA	1070.5	904.6	18%	N
23	VALSAD	3089.0	2164.5	43%	E
22	SAURASHTRA & KUTCH	839.7	507.2	66%	LE
1	AMRELI	803.2	560.1	43%	E
2	BHAVNAGAR	760.2	567.6	34%	E
3	BOTAD	921.0	523.1	76%	LE
4	DEVBHOO MI DWARKA	985.8	502.2	96%	LE
5	DIU	802.4	619.9	29%	E
6	GIR SOMNATH	1115.4	842.7	32%	E
7	JAMNAGAR	1112.8	561.1	98%	LE
8	JUNAGADH	1340.9	839.5	60%	LE
9	KUTCH	681.6	376.3	81%	LE
10	MORBI	844.6	514.8	64%	LE

11	PORBANDAR	967.2	656.4	47%	E
12	RAJKOT	942.8	591.1	59%	E
13	SURENDRANAGAR	835.5	523.7	60%	LE
	DADARA & NAGAR HAVELI	3622.8	2161.9	68%	LE
	DAMAN & DIU	2161.6	1611.2	34%	E
1	DAMAN	2916.8	2161.9	35%	E
2	DIU	802.4	619.9	29%	E
23	KONKAN & GOA	4385.8	2875.3	53%	E
	GOA	3917.6	2974.7	32%	E
1	NORTH GOA	4127.9	3073.1	34%	E
2	SOUTH GOA	3731.9	2887.9	29%	E
	MAHARASHTRA	1328.5	1004.2	32%	E
1	MUMBAI CITY	2730.8	2021.4	35%	E
2	MUMBAI SUBURBAN	3670.2	2205.8	66%	LE
3	PALGHAR	3883.4	2305.4	68%	LE
4	RAIGAD	4945.6	3148.7	57%	E
5	RATNAGIRI	4684.9	3195.1	47%	E
6	SINDHUDURG	4270.0	2940.5	45%	E
7	THANE	4084.9	2433.4	68%	LE
24	MADHYA MAHARASHTRA	1166.9	751.2	55%	E
1	AHMEDNAGAR	525.2	448.1	17%	N
2	DHULE	967.8	535.1	81%	LE
3	JALGAON	870.1	632.6	38%	E
4	KOLHAPUR	2927.5	1733.1	69%	LE
5	NANDURBAR	1344.9	860.4	56%	E
6	NASHIK	1554.6	933.8	66%	LE
7	PUNE	1803.5	861.5	109%	LE
8	SANGLI	650.4	514.5	26%	E
9	SATARA	1418.7	886.2	60%	LE
10	SHOLAPUR	299.6	481.1	-38%	D
25	MARATHWADA	590.7	668.8	-12%	N
1	AURANGABAD	607.3	581.8	4%	N
2	BEED	412.2	566.1	-27%	D
3	HINGOLI	667.4	795.3	-16%	N
4	JALNA	526.2	603.1	-13%	N
5	LATUR	550.9	706.0	-22%	D
6	NANDED	814.4	814.3	0%	N
7	OSMANABAD	514.1	603.1	-15%	N
8	PARBHANI	649.8	761.3	-15%	N
26	VIDARBHA	1054.6	943.1	12%	N
1	AKOLA	820.0	693.8	18%	N
2	AMRAOTI	892.1	862.0	3%	N
3	BHANDARA	1222.9	1157.0	6%	N
4	BULDHANA	669.8	659.4	2%	N
5	CHANDRAPUR	1269.0	1083.9	17%	N
6	GADCHIROLI	1850.5	1254.2	48%	E
7	GONDIA	1183.9	1220.2	-3%	N
8	NAGPUR	1169.8	920.4	27%	E
9	WARDHA	953.1	874.5	9%	N
10	WASHIM	634.0	789.0	-20%	D
11	YEOTMAL	563.8	805.0	-30%	D
27	CHHATTISGARH	1255.6	1142.1	10%	N
1	BALOD	1044.1	1013.5	3%	N
2	BALODA BAZAR	953.7	946.1	1%	N

3	BALRAMPUR	1010.0	1165.6	-13%	N
4	BASTAR	1802.0	1171.0	54%	E
5	BEMETARA	942.8	1008.9	-7%	N
6	BIJAPUR	2229.1	1323.4	68%	LE
7	BILASPUR	1120.3	1090.8	3%	N
8	DANTEWADA	1669.8	1290.2	29%	E
9	DHAMTARI	1122.3	1031.3	9%	N
10	DURG	878.5	984.0	-11%	N
11	GARIABAND	1195.4	1079.1	11%	N
12	JANJGIR	1039.6	1174.3	-11%	N
13	JASHPUR	1129.2	1405.7	-20%	D
14	KABIRDHAM	863.5	858.5	1%	N
15	KANKER	1341.4	1291.4	4%	N
16	KONDAGAON	1614.5	1174.1	38%	E
17	KORBA	1246.6	1310.5	-5%	N
18	KORIYA	1067.6	1132.1	-6%	N
19	MAHASAMUND	1171.8	1048.3	12%	N
20	MUNGELI	776.9	967.7	-20%	D
21	NARAYANPUR	1789.6	1202.4	49%	E
22	RAIGARH	1263.1	1202.7	5%	N
23	RAIPUR	999.4	1051.5	-5%	N
24	RAJNANDGAON	904.3	976.8	-7%	N
25	SUKMA	1701.6	1124.0	51%	E
26	SURAJPUR	1214.9	1116.6	9%	N
27	SURGUJA	830.5	1223.2	-32%	D
	ANDHRA PRADESH	564.7	514.4	10%	N
28	COASTAL A. P. & YANAM	640.6	586.9	9%	N
1	EAST GODAVARI	872.4	728.9	20%	E
2	GUNTUR	675.4	556.1	21%	E
3	KRISHNA	730.9	683.0	7%	N
4	NELLORE	364.6	350.9	4%	N
5	PRAKASAM	403.9	391.2	3%	N
6	SRIKAKULAM	817.5	742.4	10%	N
7	VISHAKHAPATNAM	701.1	648.6	8%	N
8	VIZIANAGARAM	806.5	718.8	12%	N
9	WEST GODAVARI	808.2	787.5	3%	N
10	YANAM	629.8	752.1	-16%	N
29	RAYALASEEMA	459.9	411.6	12%	N
1	ANANTAPUR	382.4	339.5	13%	N
2	CHITTOOR	516.5	441.0	17%	N
3	CUDDAPAH	413.8	401.3	3%	N
4	KURNOOL	535.6	473.5	13%	N
30	TELANGANA	805.0	759.6	6%	N
1	ADILABAD	1016.3	995.1	2%	N
2	B. KOTHAGUDEM	1073.5	902.6	19%	N
3	HYDERABAD	700.4	621.2	13%	N
4	J. BHUPALPALLY	1285.3	1131.2	14%	N
5	JAGTIAL	1009.6	831.0	21%	E
6	JANGAON	801.3	730.7	10%	N
7	JOGULAMBA GADWAL	386.2	480.3	-20%	D
8	KAMAREDDY	985.8	856.2	15%	N
9	KARIMNAGAR	1005.9	722.4	39%	E
10	KHAMMAM	707.7	808.8	-12%	N
11	KUMARAM BHEEM	1213.3	939.2	29%	E
12	M. MALKAJGIRI	633.7	666.9	-5%	N
13	MAHABUBABAD	881.1	808.5	9%	N
14	MAHABUBNAGAR	533.1	566.9	-6%	N
15	MANCHERIAL	1039.0	944.0	10%	N
16	MEDAK	775.7	751.5	3%	N
17	NAGARKURNOOL	515.8	539.5	-4%	N

18	NALGONDA	455.2	528.2	-14%	N
19	NIRMAL	910.3	902.1	1%	N
20	NIZAMABAD	1122.2	921.3	22%	E
21	PEDDAPALLE	1065.6	908.4	17%	N
22	RAJANNA SIRCILLA	903.3	710.7	27%	E
23	RANGAREDDY	449.4	547.6	-18%	N
24	SANGAREDDY	570.9	717.0	-20%	D
25	SIDDIPET	696.6	620.8	12%	N
26	SURYAPET	576.9	617.5	-7%	N
27	VIKARABAD	544.0	705.9	-23%	D
28	WANAPARTHY	592.0	560.1	6%	N
29	WARANGAL_RURAL	927.7	901.0	3%	N
30	WARANGAL_URBAN	915.9	668.2	37%	E
31	Y. BHUVANAGIRI	575.0	527.2	9%	N
31	TAMIL. PUDU.& KARAİKAL	401.9	342.0	18%	N
	TAMILNADU	401.6	341.9	17%	N
1	ARIYALUR	587.8	376.9	56%	E
2	CHENNAI	587.8	439.6	34%	E
3	COIMBATORE	766.2	686.8	12%	N
4	CUDDALORE	394.0	356.7	10%	N
5	DHARMAPURI	431.2	392.3	10%	N
6	DINDIGUL	250.4	308.4	-19%	N
7	ERODE	252.1	259.9	-3%	N
8	KANCHEEPURAM	429.7	479.4	-10%	N
9	KANYAKUMARI	629.8	490.6	28%	E
10	KARUR	209.8	199.4	5%	N
11	KRISHNAGIRI	301.5	375.2	-20%	D
12	MADURAI	303.1	325.2	-7%	N
13	NAGAPATTINAM	390.8	279.0	40%	E
14	NAMAKKAL	271.5	336.4	-19%	N
15	NILGIRIS	1221.3	874.9	40%	E
16	PERAMBALUR	357.0	278.7	28%	E
17	PUDUKKOTTAI	345.0	330.2	4%	N
18	RAMANATHAPURAM	153.1	135.0	13%	N
19	SALEM	492.0	421.0	17%	N
20	SIVAGANGA	454.1	301.9	50%	E
21	THANJAVUR	379.4	313.7	21%	E
22	THENI	351.5	215.4	63%	LE
23	TIRUNELVELI	269.0	128.4	110%	LE
24	TIRUPPUR	181.7	151.3	20%	E
25	TIRUVALLUR	589.5	455.9	29%	E
26	TIRUVANNAMALAI	683.7	449.4	52%	E
27	TIRUVARUR	434.9	302.3	44%	E
28	TOOTHUKUDI	89.8	64.7	39%	E
29	TRICHY	273.5	276.8	-1%	N
30	VELLORE	523.7	453.4	16%	N
31	VILLUPURAM	452.8	405.0	12%	N
32	VIRUDHUNAGAR	310.6	189.6	64%	LE
	PUDUCHERRY (UT)	553.2	425.6	30%	E
1	KARAİKAL	365.8	308.6	19%	N
2	MAHE	2971.8	2503.4	19%	N
3	PUDUCHERRY	574.1	392.7	46%	E
4	YANAM	629.8	752.1	-16%	N
	KARNATAKA	1033.3	840.7	23%	E
32	COASTAL KARNATAKA	3796.5	3095.1	23%	E
1	DAKSHINA KANNADA	3515.5	3354.3	5%	N
2	UDUPI	4536.3	3742.3	21%	E
3	UTTARA KANNADA	3670.1	2753.7	33%	E

33	N. I. KARNATAKA	612.3	497.1	23%	E
1	BAGALKOTE	441.5	353.8	25%	E
2	BELAGAVI	1088.4	572.1	90%	LE
3	BIDAR	643.3	680.5	-5%	N
4	DHARWAD	746.5	524.1	42%	E
5	GADAG	444.7	367.4	21%	E
6	HAVERI	772.9	507.1	52%	E
7	KALABURGI	594.2	588.0	1%	N
8	KOPPAL	424.2	388.2	9%	N
9	RAICHUR	441.7	464.1	-5%	N
10	VIJAYAPURA	370.0	416.3	-11%	N
11	YADGIR	473.8	560.8	-16%	N
34	S. I. KARNATAKA	839.2	681.8	23%	E
1	BALLARI	439.0	388.6	13%	N
2	BENGALURU RURAL	433.0	469.6	-8%	N
3	BENGALURU URBAN	453.5	476.5	-5%	N
4	CHAMARAJANAGAR	383.1	330.8	16%	N
5	CHIKABALLAPURA	386.7	422.0	-8%	N
6	CHIKKAMAGALURU	2091.5	1591.3	31%	E
7	CHITRADURGA	371.0	276.9	34%	E
8	DAVANGERE	485.4	388.5	25%	E
9	HASSAN	825.8	673.9	23%	E
10	KODAGU	2628.9	2257.4	16%	N
11	KOLAR	317.2	393.4	-19%	N
12	MANDYA	418.9	305.1	37%	E
13	MYSURU	612.2	366.7	67%	LE
14	RAMANAGARA	436.9	465.9	-6%	N
15	SHIVAMOGGA	2124.3	1600.3	33%	E
16	TUMAKURU	428.9	372.7	15%	N
35	KERALA & MAHE	2310.2	2049.3	13%	N
	KERALA	2310.0	2049.3	0.1	N
1	ALAPUZHA	1799.2	1722.3	4%	N
2	CANNUR	3135.6	2638.1	19%	N
3	ERNAKULAM	2377.4	2038.0	17%	N
4	IDUKKI	2328.2	2615.0	-11%	N
5	KASARGOD	3417.7	2971.4	15%	N
6	KOLLAM	1423.9	1280.9	11%	N
7	KOTTAYAM	2133.2	1871.9	14%	N
8	KOZHICODE	3466.6	2577.4	34%	E
9	MALAPPURAM	2368.3	2005.5	18%	N
10	PALAKKAD	2125.9	1531.6	39%	E
11	PATHANAMTHITTA	1716.8	1618.7	6%	N
12	THIRUVANANTHAPURAM	1039.9	865.1	20%	E
13	THRISSUR	2499.2	2280.8	10%	N
14	WYNAD	2378.0	2525.5	-6%	N
1	MAHE	2971.8	2503.4	0.1871	N
36	LAKSHADWEEP	1231.7	1013.1	22%	E