

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 6490
TO BE ANSWERED ON 5th MAY, 2010
ASSESSMENT ON RAINFALL

**6490. SHRI PAKURI LAL:
SHRI DEVJI M. PATEL:**

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has categorised the various parts of the country into regions with excessive, normal and minimum rainfall on the basis of rainfall received during the last three years;
- (b) if so, the details thereof, year-wise, State-wise and category-wise;
- (c) whether the Government has explored the possibilities of channelising the rain water from excessive rainfall regions to minimum rainfall regions; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE)
MINISTRY OF SCIENCE AND TECHNOLOGY, MINISTRY OF EARTH SCIENCES,
MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE, MINISTER OF STATE IN
THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND MINISTER
OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS
(SHRI PRITHVIRAJ CHAVAN)

- (a)-(b) No Madam. However, India Meteorological Department (IMD) prepares rainfall distribution state-wise, meteorological subdivision wise and for country as a whole in the time scale of weekly, monthly, seasonal and annual. Distribution of rainfall during the last three years shows year to year variability with 6-Nos., 4-Nos. and 19 -Nos. of states falling under rainfall deficient category during monsoon seasons of 2007, 2008 and 2009 respectively. Similarly on annual time scale 4-Nos., 6-Nos and 19-Nos of states were deficient in 2007, 2008 and 2009 respectively. Details are presented in Annexure-I and Annexure-II.
- (c)-(d) The Ministry of Water Resources and Central Water Commission(CWC) in 1980 had started exploring the possibilities of channelizing the excess water through a National Perspective Plan for water resources development in India comprising two components: Himalayan and Peninsular Components. A major feature of this plan was transfer of water from water surplus basins to water deficit basins/ regions in India by Inter Basin Water Transfer Projects.

The National Water Development Agency (NWDA) was set up in 1982 as an autonomous society under Ministry of Water Resources to give concrete shape to these proposals by carrying out the detailed studies, surveys and investigation work and to prepare feasibility reports of the links under the National Perspective Plan. The NWDA, after carrying out detailed studies, identified 30 links: 14 under Himalayan Component; and 16 under Peninsular Component for preparation of Feasibility Reports. NWDA has completed the pre-feasibility reports for all the links and Feasibility study of 16 links. The Feasibility Reports for remaining links are at various stage of completion. The NWDA had taken up the discussions with the concerned State Governments for building the consensus for preparation of Detailed Project Report (DPR) of individual link proposals. After consensus is reached amongst the concerned States for a particular link, the work for preparation of DPR of that link shall be taken up by NWDA.

STATEWISE MONSOON RAINFALL(mm) DISTRIBUTION

S. NO. STATE/UT	01.06.2007 TO 30.09.2007		%DEP	CAT
	ACTUAL (mm)	NORMAL (mm)		
1. A & N ISLAND (UT)	1702.6	1755.2	-3%	N
2. ARUNACHAL PRADESH	1667.1	1834.9	-9%	N
3. ASSAM	1484.4	1434.1	4%	N
4. MEGHALAYA	4699.7	5585.7	-16%	N
5. NAGALAND	986.9	1344.1	-27%	D
6. MANIPUR	900.3	839.3	7%	N
7. MIZORAM	2006.4	1345.1	49%	E
8. TRIPURA	1950.6	1476.6	32%	E
9. SIKKIM	1964.9	2023.9	-3%	N
10. WEST BENGAL	1743.4	1333.6	31%	E
11. ORISSA	1441.9	1164.9	24%	E
12. BIHAR	1343.0	1039.2	29%	E
13. JHARKHAND	1253.5	1092.5	15%	N
14. UTTAR PRADESH	642.1	856.1	-25%	D
15. UTTARAKHAND	1564.4	1223.1	28%	E
16. HARYANA	305.9	462.4	-34%	D
17. CHANDIGARH (UT)	644.7	846.6	-24%	D
18. DELHI	545.9	667.1	-18%	N
19. PUNJAB	340.3	501.8	-32%	D
20. HIMACHAL PRADESH	497.0	773.7	-36%	D
21. JAMMU & KASHMIR	498.1	513.6	-3%	N
22. RAJASTHAN	358.5	417.9	-14%	N
23. MADHYA PRADESH	827.6	989.0	-16%	N
24. CHHATTISGARH	1104.8	1205.8	-8%	N
25. GUJARAT	1002.7	678.2	48%	E
26. DNH & DAMAN (UTs)	2488.0	2142.2	16%	N
27. DIU (UT)		574.2		*
28. GOA	3605.1	2773.9	30%	E
29. MAHARASHTRA	1147.6	1005.2	14%	N
30. ANDHRA PRADESH	755.0	607.8	24%	E
31. TAMILNADU	337.9	315.6	7%	N
32. PONDICHERRY (UT)	358.3	326.7	10%	N
33. KARNATAKA	1082.4	834.7	30%	E
34. KERALA	2786.3	2143.0	30%	E
35. LAKSHADWEEP(UT)	1467.1	985.2	49%	E

STATEWISE MONSOON RAINFALL (mm) DISTRIBUTION

S. NO. STATE/UT	01.06.2008	TO	30.09.2008	%DEP	CAT
	ACTUAL (mm)		NORMAL (mm)		
1. A & N ISLAND (UT)	1752.1		1755.2	0%	N
2. ARUNACHAL PRADESH	1809.5		1834.9	-1%	N
3. ASSAM	1420.0		1434.1	-1%	N
4. MEGHALAYA	4030.5		5585.7	-28%	D
5. NAGALAND	940.9		1344.1	-30%	D
6. MANIPUR	848.0		839.3	1%	N
7. MIZORAM	1309.3		1345.1	-3%	N
8. TRIPURA	1208.1		1476.6	-18%	N
9. SIKKIM	2030.9		2023.9	0%	N
10. WEST BENGAL	1498.0		1333.6	12%	N
11. ORISSA	1418.6		1164.9	22%	E
12. BIHAR	1145.0		1039.2	10%	N
13. JHARKHAND	1097.5		1092.5	0%	N
14. UTTAR PRADESH	975.6		856.1	14%	N
15. UTTARAKHAND	1151.0		1223.1	-6%	N
16. HARYANA	531.7		462.4	15%	N
17. CHANDIGARH (UT)	1113.0		846.6	31%	E
18. DELHI	633.7		667.1	-5%	N
19. PUNJAB	603.8		501.8	20%	E
20. HIMACHAL PRADESH	737.9		773.7	-5%	N
21. JAMMU & KASHMIR	524.3		513.6	2%	N
22. RAJASTHAN	417.7		417.9	0%	N
23. MADHYA PRADESH	816.6		989.0	-17%	N
24. CHHATTISGARH	1064.4		1205.8	-12%	N
25. GUJARAT	711.9		678.2	5%	N
26. DNH & DAMAN (UTs)	2280.5		2142.2	6%	N
27. DIU (UT)			574.2		*
28. GOA	3301.8		2773.9	19%	N
29. MAHARASHTRA	952.2		1005.2	-5%	N
30. ANDHRA PRADESH	629.9		607.8	4%	N
31. TAMILNADU	325.1		315.6	3%	N
32. PONDICHERRY (UT)	156.4		326.7	-52%	D
33. KARNATAKA	788.8		834.7	-6%	N
34. KERALA	1678.3		2143.0	-22%	D
35. LAKSHADWEEP (UT)	933.9		985.2	-5%	N

STATEWISE MONSOON RAINFALL(mm) DISTRIBUTION

S. NO. STATE/UT	01.06.2009	TO	30.09.2009	%DEP	CAT
	ACTUAL (mm)		NORMAL (mm)		
1. A & N ISLAND (UT)	1671.8		1755.2	-5%	N
2. ARUNACHAL PRADESH	1512.2		1834.9	-18%	N
3. ASSAM	1171.5		1434.1	-18%	N
4. MEGHALAYA	3227.5		5585.7	-42%	D
5. NAGALAND	776.4		1344.1	-42%	D
6. MANIPUR	608.5		839.3	-27%	D
7. MIZORAM	1088.4		1345.1	-19%	N
8. TRIPURA	1348.3		1476.6	-9%	N
9. SIKKIM	1398.2		2023.9	-31%	D
10. WEST BENGAL	1121.2		1333.6	-16%	N
11. ORISSA	1168.0		1164.9	0%	N
12. BIHAR	750.9		1039.2	-28%	D
13. JHARKHAND	839.2		1092.5	-23%	D
14. UTTAR PRADESH	515.0		856.1	-40%	D
15. UTTARAKHAND	898.1		1223.1	-27%	D
16. HARYANA	299.9		462.4	-35%	D
17. CHANDIGARH (UT)	758.9		846.6	-10%	N
18. DELHI	484.8		667.1	-27%	D
19. PUNJAB	331.2		501.8	-34%	D
20. HIMACHAL PRADESH	507.4		773.7	-34%	D
21. JAMMU & KASHMIR	338.5		513.6	-34%	D
22. RAJASTHAN	272.0		417.9	-35%	D
23. MADHYA PRADESH	692.8		989.0	-30%	D
24. CHHATTISGARH	796.2		1205.8	-34%	D
25. GUJARAT	609.0		678.2	-10%	N
26. DNH & DAMAN (UTs)	2004.6		2142.2	-6%	N
27. DIU (UT)	899.6		574.2	57%	E
28. GOA	2814.6		2773.9	1%	N
29. MAHARASHTRA	806.4		1005.2	-20%	D
30. ANDHRA PRADESH	448.5		607.8	-26%	D
31. TAMILNADU	315.1		315.6	0%	N
32. PONDICHERRY (UT)	180.3		326.7	-45%	D
33. KARNATAKA	969.3		834.7	16%	N
34. KERALA	1958.9		2143.0	-9%	N
35. LAKSHADWEEP (UT)	997.9		985.2	1%	N

STATEWISE ANNUAL RAINFALL (mm) DISTRIBUTION

S. NO. STATE/UT	01.01.2007	TO	31.12.2007	%DEP	CAT
	ACTUAL (mm)		NORMAL (mm)		
1. A & N ISLAND (UT)	2656.7		3001.8	-11%	N
2. ARUNACHAL PRADESH	2439.2		2935.9	-17%	N
3. ASSAM	2175.1		2255.3	-4%	N
4. MEGHALAYA	6002.0		7281.3	-18%	N
5. NAGALAND	1884.3		1910.8	-1%	N
6. MANIPUR	1640.4		1370.7	20%	E
7. MIZORAM	2699.8		2178.2	24%	E
8. TRIPURA	2924.2		2400.3	22%	E
9. SIKKIM	2830.6		3090.5	-8%	N
10. WEST BENGAL	2145.7		1734.5	24%	E
11. ORISSA	1664.9		1472.5	13%	N
12. BIHAR	1441.4		1317.3	9%	N
13. JHARKHAND	1466.2		1230.8	19%	N
14. UTTAR PRADESH	781.7		979.4	-20%	D
15. UTTARAKHAND	1894.2		1582.6	20%	E
16. HARYANA	463.7		558.6	-17%	N
17. CHANDIGARH (UT)	972.3		1077.7	-10%	N
18. DELHI	719.1		794.0	-9%	N
19. PUNJAB	494.1		648.8	-24%	D
20. HIMACHAL PRADESH	862.6		1323.8	-35%	D
21. JAMMU & KASHMIR	1037.9		1246.0	-17%	N
22. RAJASTHAN	398.9		460.9	-13%	N
23. MADHYA PRADESH	877.4		1093.7	-20%	D
24. CHHATTISGARH	1244.1		1368.4	-9%	N
25. GUJARAT	1005.0		716.4	40%	E
26. DNH & DAMAN (UTs)	2490.3		2195.6	13%	N
27. DIU (UT)			625.0		E
28. GOA	3867.2		3045.2	27%	E
29. MAHARASHTRA	1188.1		1147.1	4%	N
30. ANDHRA PRADESH	974.9		900.9	8%	N
31. TAMILNADU	967.2		909.6	6%	N
32. PONDICHERRY (UT)	1355.0		1363.2	-1%	N
33. KARNATAKA	1307.0		1145.8	14%	N
34. KERALA	3619.6		3097.5	17%	N
35. LAKSHADWEEP (UT)	2037.9		1584.7	29%	E

STATEWISE ANNUAL RAINFALL(mm) DISTRIBUTION

S. NO. STATE/UT	01.01.2008	TO	31.12.2008	%DEP	CAT
	ACTUAL (mm)		NORMAL (mm)		
1. A & N ISLAND (UT)	3335.2		3001.8	11%	N
2. ARUNACHAL PRADESH	2470.5		2935.9	-16%	N
3. ASSAM	2057.7		2255.3	-9%	N
4. MEGHALAYA	5074.4		7281.3	-30%	D
5. NAGALAND	1289.1		1910.8	-33%	D
6. MANIPUR	1750.9		1370.7	28%	E
7. MIZORAM	1090.7		2178.2	-50%	D
8. TRIPURA	1836.7		2400.3	-23%	D
9. SIKKIM	2799.5		3090.5	-9%	N
10. WEST BENGAL	1829.5		1734.5	5%	N
11. ORISSA	1600.4		1472.5	9%	N
12. BIHAR	1306.7		1317.3	-1%	N
13. JHARKHAND	1200.6		1230.8	-2%	N
14. UTTAR PRADESH	1118.5		979.4	14%	N
15. UTTARAKHAND	1298.6		1582.6	-18%	N
16. HARYANA	627.6		558.6	12%	N
17. CHANDIGARH (UT)	1224.5		1077.7	14%	N
18. DELHI	807.3		794.0	2%	N
19. PUNJAB	708.9		648.8	9%	N
20. HIMACHAL PRADESH	1049.0		1323.8	-21%	D
21. JAMMU & KASHMIR	1087.2		1246.0	-13%	N
22. RAJASTHAN	627.1		460.9	36%	E
23. MADHYA PRADESH	857.3		1093.7	-22%	D
24. CHHATTISGARH	1144.0		1368.4	-16%	N
25. GUJARAT	725.9		716.4	1%	N
26. DNH & DAMAN (UTs)	2283.1		2195.6	4%	N
27. DIU (UT)			625.0		E
28. GOA	3430.8		3045.2	13%	N
29. MAHARASHTRA	1057.1		1147.1	-8%	N
30. ANDHRA PRADESH	968.3		900.9	7%	N
31. TAMILNADU	1194.0		909.6	31%	E
32. PONDICHERRY (UT)	1659.7		1363.2	22%	E
33. KARNATAKA	1126.9		1145.8	-2%	N
34. KERALA	2534.1		3097.5	-18%	N
35. LAKSHADWEEP UT)	1726.4		1584.7	9%	N

STATEWISE ANNUAL RAINFALL(mm) DISTRIBUTION

S. NO. STATE/UT	01.01.2009	TO	31.12.2009	%DEP	CAT
	ACTUAL (mm)		NORMAL (mm)		
1. A & N ISLAND (UT)	2614.5		3001.8	-13%	N
2. ARUNACHAL PRADESH	2163.2		2935.9	-26%	D
3. ASSAM	1681.1		2255.8	-25%	D
4. MEGHALAYA	4254.6		7281.3	-42%	D
5. NAGALAND	1057.0		1910.8	-45%	D
6. MANIPUR	1008.1		1370.7	-26%	D
7. MIZORAM	1667.3		2178.2	-23%	D
8. TRIPURA	2076.1		2400.3	-14%	N
9. SIKKIM	2291.2		3090.5	-26%	D
10. WEST BENGAL	1548.4		1734.5	-11%	N
11. ORISSA	1397.7		1472.5	-5%	N
12. BIHAR	993.6		1230.8	-19%	N
13. JHARKHAND	1061.1		1320.1	-20%	D
14. UTTAR PRADESH	610.2		979.4	-38%	D
15. UTTARAKHAND	1076.0		1582.6	-32%	D
16. HARYANA	369.5		558.6	-34%	D
17. CHANDIGARH (UT)	873.9		1077.7	-19%	N
18. DELHI	560.0		794.0	-29%	D
19. PUNJAB	403.9		648.8	-38%	D
20. HIMACHAL PRADESH	805.6		1323.8	-39%	D
21. JAMMU & KASHMIR	872.7		1246.0	-30%	D
22. RAJASTHAN	293.0		460.9	-36%	D
23. MADHYA PRADESH	846.9		1093.7	-23%	D
24. CHHATTISGARH	859.7		1368.4	-37%	D
25. GUJARAT	626.9		716.4	-12%	N
26. DNH & DAMAN (UTs)	2097.5		2212.8	-5%	N
27. DIU (UT)	907.6		625.0	45%	E
28. GOA	3329.0		3045.2	9%	N
29. MAHARASHTRA	1017.0		1147.1	-11%	N
30. ANDHRA PRADESH	694.3		900.9	-23%	D
31. TAMILNADU	931.9		909.6	2%	N
32. PONDICHERRY (UT)	1583.9		1363.2	16%	N
33. KARNATAKA	1349.9		1145.8	18%	N
34. KERALA	2816.0		3097.5	-9%	N
35. LAKSHADWEEP (UT)	1572.5		1584.7	-1%	N