## GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES

### LOK SABHA

UNSTARRED QUESTION No. **2776** TO BE ANSWERED ON 11<sup>th</sup> AUGUST, 2010

## RAINFALL DURING MONSOON

#### 2776. SHRI S. PAKKIRAPPA:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether monsoon season continues till about September starting from the month of May in the country;
- (b) if not, the assessment of the Government in this regard, State-wise;
- (c) the average rain in each month from May to September in terms of percentage of total monsoon rains in the country, State-wise; and
- (d) the average quantity of water which the country gets through monsoon rains every year?

### **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) The principal monsoon rainfall season for the country spans over a four month period from June to September (122-days). In terms of climatology, the monsoon sets in over Kerala from the Arabian Sea and over North East India from the Bay of Bengal around 1<sup>st</sup> June. By 10<sup>th</sup> June, monsoon covers most parts of Maharashtra, North East India, few parts of Chattisgarh, Orissa, West Bengal and Bihar. Subsequently, it covers the whole country till western parts of Rajasthan only by 15<sup>th</sup> July.

Starting from the onset over Kerala, monsoon circulation establishment over the whole country takes about 45-days. Climatologically, the retreat of the monsoon from the western parts of Rajasthan, starts around 1<sup>st</sup> September and that retreats from most parts of the country by 30<sup>th</sup> September (in about 30-days). Essentially, the monsoon circulation resides over the North West India for about 45-days (15<sup>th</sup> July – 1<sup>st</sup> September) while it resides over the Peninsular India for about 122-days (1<sup>st</sup> June – 30<sup>th</sup> September). The retreat of the summer monsoon over the peninsular India coincides with the onset of winter monsoon over southern parts of India covering Tamilnadu, south Andhra Pradesh and Kerala and that resides up to first 1-2 weeks of December.

- (c) Detailed account of the average rain in each month from May to September in terms of percentage of total monsoon rains in the country, State-wise is presented in Enclosure I. Major quantum of seasonal rainfall is received during the period July September and quantum of rainfall during June is lower as the most of the period is considered as the establishment phase of monsoon
- (d) The country receives on average about 3000 Billion Cubic Meters (BCM) quantum of water through monsoon (June-September) rains every year.

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# **Enclosure-1**

# **STATE-WISE RAINFALL DISTRIBUTION**

S.	CT A TEC	Normal Rainfall (mm)					
NO.	STATES	MAY	JUNE	JULY	AUGUST	SEPTEMBER	MAY-SEPT.
1	A & N ISLAND(UT)	18%	22%	19%	20%	21%	2067.8
2.	ARUNACHAL PRADESH	13%	24%	27%	18%	18%	1981.0
3.	ASSAM	19%	24%	23%	19%	15%	1800.6
4.	MEGHALAYA	15%	28%	26%	18%	13%	4192.4
5.	NAGALAND	14%	23%	26%	22%	15%	1655.3
6.	MANIPUR	11%	25%	27%	23%	14%	1925.6
7.	MIZORAM	16%	25%	21%	20%	18%	1882.9
8.	TRIPURA	20%	26%	21%	19%	14%	1814.8
9.	SIKKIM	15%	24%	24%	22%	15%	2247.7
10.	WEST BENGAL	9%	20%	27%	24%	20%	1461.9
11.	ORISSA	5%	17%	28%	30%	20%	1229.3
12.	JHARKHAND	4%	17%	30%	29%	21%	1129.8
13.	BIHAR	5%	16%	31%	27%	21%	1077.2
14.	UTTAR PRADESH	2%	10%	34%	34%	20%	869.8
15.	UTTARAKHAND	5%	13%	33%	33%	16%	1269.2
16.	HARYANA	3%	9%	35%	35%	18%	473.4
17.	CHANDIGARH(UT)	4%	14%	32%	33%	18%	877.5
18.	DELHI	3%	9%	34%	35%	19%	687.9
19.	PUNJAB	3%	8%	37%	33%	20%	511.1
20.	HIMACHAL PRADESH	7%	11%	36%	30%	16%	839.6
21.	JAMMU & KASHMIR	12%	10%	31%	32%	15%	597.6
22.	RAJASTHAN	2%	10%	36%	36%	16%	431.6
23.	MADHYA PRADESH	1%	12%	34%	35%	19%	991.5
24.	GUJARAT	1%	14%	39%	30%	16%	681.6
25.	DNH & DAMAN(UTs)	0%	16%	38%	29%	17%	2314.3
26.	DIU(UT)	0%	24%	43%	23%	9%	576.0
27.	GOA	3%	31%	35%	20%	10%	2832.7
28.	MAHARASHTRA	2%	19%	33%	27%	18%	1020.2
29.	CHHATISGARH	2%	15%	32%	32%	19%	1223.6
30.	ANDHRA PRADESH	7%	16%	27%	26%	24%	653.4
31.	TAMILNADU	18%	11%	19%	23%	29%	381.4
32.	PONDICHERRY(UT)	8%	10%	22%	29%	31%	367.8
33.	KARNATAKA	9%	21%	30%	22%	17%	926.0
34.	KERALA	11%	28%	31%	19%	11%	2409.1
35.	LAKSHADWEEP(UT)	15%	28%	24%	18%	14%	1163.4