# GOVERNMENT OF INDIA MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

#### LOK SABHA

# UNSTARRED QUESTION NO. †5349

ANSWERED ON 06.04.2017

## LOSSES DUE TO FLOODS AND RAINS

#### †5349. SHRI RAM CHARAN BOHRA

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION be pleased to state:

- (a) whether the Government has made any assessment of losses caused due to regular floods and rains every year in the country and if so, the details thereof;
- (b) whether the Government has estimated the quantum of rainwater wasted every year in the country and if so, the details thereof;
- (c) whether the Government proposes to channelise this water to the areas facing shortage of water to prevent the losses occurring due to floods and to check the wastage of precious water; and
- (d) if so, the details thereof and the steps taken/being taken by the Government in this regard?

## **ANSWER**

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION

## (DR. SANJEEV KUMAR BALYAN)

- (a) Yes, Madam. Central Water Commission (CWC) compiles the flood damage data every year reported by the States/ UTs in the predefined proforma. The all India average flood damage data since 1953 as reported by the State Governments is at **Annex-I.**
- (b),(c) & (d) As per the assessment done by CWC in the year 1993, the river basin-wise average annual water availability in the country is 1869 billion cubic meters (BCM). It is estimated that owing to topographic, hydrological and other constraints, the utilizable water with conventional approach is 1123 BCM which comprises of 690 BCM of surface water and 433 BCM of replenishable ground water resources. Further, it has been estimated in the year 2009 by CWC that about 450 BCM of surface water is being utilized for various purposes. Also, as per the July 2014 report of CGWB titled ground water draft for irrigation, domestic and industrial uses is 245 BCM. Thus, the quantity of water flowing down to the sea can be approximately considered as 1174 BCM.

Water being a State subject, steps for augmentation, conservation and efficient management to ensure sustainability of water resources are undertaken by the respective State Governments. With a view to meet the growing demand for water, various measures are taken by the respective State Governments for bringing the available water resources within the category of utilizable resources to the maximum possible extent which include creation of storages, restoration of water bodies, rainwater harvesting, artificial recharge of ground water, adoption of better management practices etc. State Governments conceptualise, plan and implement major, medium and minor schemes (both surface and ground water) for utilization of water resources.

In order to supplement the efforts of the State Governments, Government of India provides technical and financial assistance to State Governments to encourage sustainable development and efficient management of water resources through various schemes and programmes namely "Accelerated Irrigation Benefits Programme (AIBP)" and "Repair, Renovation and Restoration of Water Bodies" (RRR). Pradhan Mantri Krishi Sinchai Yojna (PMKSY) has been formulated amalgamating on-going schemes viz. Accelerated Irrigation Benefit Programme (AIBP) of the Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD&GR), Integrated Watershed Management Programme (IWMP) of Department of Land Resources (DoLR) and the On-Farm Water Management (OFWM) of Department of Agriculture and Cooperation (DAC).

Under the National Perspective Plan (NPP) prepared by this Ministry for water resources development through Inter-basin transfer of water from surplus basin to deficit basins, National Water Development Agency(NWDA) has identified 30 links (16 under Peninsular Component and 14 under Himalayan component) for preparation of feasibility reports. The feasibility reports of 14 links under Peninsular Component and 2 links in Himalayan component have been prepared. The DPR in respect of 3 links have been completed.

The inter-basin transfer proposals would create additional irrigation potential, hydropower generation, apart from incidental benefits of flood moderation, navigation, drinking and industrial water supply, fisheries etc.

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# ANNEXURE REFERRED TO IN REPLY TO PART (a) OF LOK SABHA UNSTARRED QUESTION NO.5349 FOR ANSWER ON 06.04.2017 REGARDING "LOSSES DUE TO FLOODS AND RAINS"

STATEMENT SHOWING DAMAGE DUE TO FLOODS / HEAVY RAINS DURING 1953 TO 2016											
SI. No.	Year	Area affected in mHa	Polulati on affected in million	Damaged Area in mHa	Values in Rs. crore	Damage to Houses Nos.	Values in Rs. crore	Cattle Lost (Nos)	Huma n live Lost(N os)	Damage to Public Utilities in Rs. crore	Total damages crops, houses & Public Utilities in Rs. crore
											(col.6+8+11 )
1	2	3	4	5	6	7	8	9	10	11	12
1	1953	2.290	24.280	0.930	42.080	264924	7.420	47034	37	2.900	52.400
2	1954	7.490	12.920	2.610	40.520	199984	6.561	22552	279	10.150	57.231
3	1955	9.440	25.270	5.310	77.800	1666789	20.945	72010	865	3.980	102.725
4	1956	9.240	14.570	1.110	44.440	725776	8.047	16108	462	1.140	53.627
5	1957	4.860	6.760	0.450	14.120	318149	4.979	7433	352	4.270	23.369
6	1958	6.260	10.980	1.400	38.280	382251	3.896	18439	389	1.790	43.966
7	1959	5.770	14.520	1.540	56.760	648821	9.418	72691	619	20.020	86.198
8	1960	7.530	8.350	2.270	42.550	609884	14.309	13908	510	6.310	63.169
9	1961	6.560	9.260	1.970	24.040	533465	0.889	15916	1374	6.440	31.369
10	1962	6.120	15.460	3.390	83.180	513785	10.655	37633	348	1.050	94.885
11	1963	3.490	10.930	2.050	30.170	420554	3.701	4572	432	2.740	36.611
12	1964	4.900	13.780	2.490	56.870	255558	4.588	4956	690	5.149	66.607
13	1965	1.460	3.610	0.270	5.870	112957	0.195	7286	79	1.070	7.135
14	1966	4.740	14.400	2.160	80.150	217269	2.544	9071	180	5.736	88.430
15	1967	7.120	20.460	3.270	133.310	567995	14.264	5827	355	7.857	155.431
16	1968	7.150	21.170	2.620	144.610	682704	41.112	130305	3497	25.373	211.095
17	1969	6.200	33.220	2.910	281.900	1268660	54.423	270328	1408	68.112	404.435
18	1970	8.460	31.830	4.910	162.780	1434030	48.606	19198	1076	76.441	287.827
19	1971	13.250	59.740	6.240	423.130	2428031	80.241	12866	994	129.113	632.484
20	1972	4.100	26.690	2.450	98.560	897301	12.460	58231	544	47.174	158.194
21	1973	11.790	64.080	3.730	428.030	869797	52.482	261016	1349	88.489	569.001
22	1974	6.700	29.450	3.330	411.640	746709	72.434	16846	387	84.942	569.016
23	1975	6.170	31.360	3.850	271.490	803705	34.097	17345	686	166.050	471.637
24	1976	11.910	50.460	6.040	595.030		92.160	80062	1373	201.495	888.685
25	1977	11.460	49.430	6.840	720.610	1661625	152.290	556326	11316	328.948	1201.848
26	1978	17.500	70.450	9.960	911.090		167.574	239174	3396	376.100	1454.764
27	1979	3.990	19.520	2.170	169.970		210.606	618248	3637	233.627	614.203
28	1980	11.460	54.120	5.550	366.370		170.851	59173	1913	303.283	840.504
29	1981	6.120	32.490	3.270	524.560		159.630	82248	1376	512.314	1196.504
30	1982	8.870	56.010	5.000	589.400		383.869	246750	1573	671.607	1644.876
31	1983	9.020	61.030	3.290	1285.850		332.327	153095	2378	873.429	2491.606
32	1984	10.710	54.550	5.190	906.090		181.308	141314	1661	818.164	1905.562
33	1985	8.380	59.590	4.650	1425.370	2449878	583.855	43008	1804	2050.043	4059.268

34	1986	8.810	55.500	4.580	1231.580	2049277	534.410	60450	1200	1982.535	3748.525
35	1987	8.890	48.340	4.940	1154.640	2919380	464.490	128638	1835	950.590	2569.720
36	1988	16.290	59.550	10.150	2510.900	2276533	741.600	150996	4252	1377.800	4630.300
37	1989	8.060	34.150	3.010	956.740	782340	149.820	75176	1718	1298.770	2405.330
38	1990	9.303	40.259	3.179	695.610	1019930	213.733	134154	1855	455.266	1708.920
39	1991	6.357	33.889	2.698	579.015	1134410	180.421	41090	1187	728.893	1488.329
40	1992	2.645	19.256	1.748	1027.578	687489	306.284	78669	1533	2010.670	3344.532
41	1993	11.439	30.409	3.206	1308.627	1926049	528.324	211193	2864	1445.534	3282.485
42	1994	4.805	27.548	3.963	888.622	914664	165.206	52315	2078	740.762	1794.590
43	1995	5.245	35.932	3.245	1714.787	2001898	1307.894	62438	1814	679.627	3702.308
44	1996	8.049	44.729	3.827	1124.491	726799	176.589	73208	1803	861.393	3005.743
45	1997	4.569	29.663	2.258	692.743	505128	152.504	27754	1402	1985.934	2831.181
46	1998	10.845	47.435	7.495	2594.167	1932874	1108.783	107098	2889	5157.771	8860.721
47	1999	7.765	27.993	1.753	1850.873	1613260	1299.057	91289	745	462.830	3612.760
48	2000	5.382	45.013	3.580	4246.622	2628855	680.943	123252	2606	3936.979	8864.544
49	2001	6.175	26.463	3.964	688.481	716187	816.474	32704	1444	5604.461	7109.416
50	2002	7.090	26.323	2.194	913.092	762492	599.368	21533	1001	1062.083	2574.543
51	2003	6.120	43.201	4.268	7307.230	775379	756.481	15161	2166	3262.154	11325.866
52	2004	5.314	43.725	2.888	778.694	1664388	879.601	134106	1813	1656.090	3314.385
53	2005	12.562	22.925	12.299	2370.923	715749	380.531	119674	1455	4688.219	7439.672
54	2006	1.096	25.224	1.822	2850.668	1497428	3636.848	266945	1431	13303.926	19790.922
55	2007	7.145	41.402	8.795	3121.532	3280233	2113.108	89337	3389	8049.037	13283.677
56	2008	3.427	29.910	3.186	3401.563	1566809	1141.891	101780	2876	5046.481	9589.935
57	2009	3.844	29.537	3.592	4232.609	1235628	10809.795	63383	1513	17509.353	32551.758
58	2010	2.624	18.297	4.994	5887.380	293830	875.952	39706	1582	12757.253	19520.586
59	2011	1.895	15.973	2.718	1393.847	1152518	410.475	35982	1761	6053.570	7857.892
60	2012	2.141	14.689	1.950	1534.108	174526	240.572	31558	933	9169.968	10944.648
61	2013*	3.694	21.147	3.635	3214.987	662547	527.595	156855	2137	3911.699	11070.011
62	2014*	10.242	9.248	5.498	1443.931	168735	459.216	15735	1402	4722.741	6626.294
63	2015*	1.806	28.951	2.877	13816.760	939787	8046.944	29327	977	8672.332	33257.019
64	2016*	0.612	18.219	0.752	642.156	152339	69.004	18987	1077	852.160	1386.854
	TOTAL	444.749	2005.640	238.285	86661.576	76140206	42716.650	5951462	104077	137532.186	274058.127
	AVG	6.949	31.338	3.723	1354.087	1189691	667.448	92992	1626	2148.940	4282.158
	MAX	17.500	70.450	12.299	13816.760	3507542	10809.795	618248	11316	17509.353	33257.019
	(YEAR)	1978	1978	2005	2015	1978	2009	1979	1977	2009	2009
	*	* Tentative									