

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. 1759
ANSWERED ON 28.11.2019

SOIL EROSION DUE TO FLOODS

1759. DR. MOHAMMAD JAWED

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether acres of lands is being eroded every year due to floods or otherwise on the banks of different rivers in the country and if so, the details thereof;
- (b) the steps being taken to stop soil erosion;
- (c) whether the Government proposes to raise protection to avoid future erosion; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI & SOCIAL JUSTICE AND EMPOWERMENT

(SHRI RATTAN LAL KATARIA)

(a) Soil erosion is caused by heavy floods and consequent damages. Soil erosion by river is a dynamic and natural process resulting in changes in river course and causing loss of land, the intensity of which varies with time and space. The extent of maximum area affected in a year by floods as per XII Plan Working Group Report on “Flood Management and Region Specific Issues” is 49.815 million hectare. The State-wise details of losses due to floods are compiled by Central water Commission (CWC) based on the data provided by the States. The details during the years 2016, 2017 and 2018 are given in **Annexure-I to III.**

(b) to (d) Flood management & anti-erosion schemes are planned, investigated and implemented by the State Governments with their own resources as per priority within the State. The Union Government supplements the efforts of the States by way of technical guidance and promotional financial assistance for flood management in critical areas. Government of India launched “Flood Management Programme (FMP)” during XI Plan period for providing central assistance to the State Governments for taking up works related to river management, flood control, anti-erosion, drainage development, flood proofing works, restoration of damaged flood management works and anti-sea erosion works which was continued during XII Plan. A scheme viz. “Flood Management and Border Areas Programme (FMBAP)” for flood management works in entire country and River Management activities and works related to Border Areas with an outlay of Rs.3342 crores is under implementation during 2017-18 to 2019-20. Central Assistance amounting to Rs.5863.95 crores has been released since XI Plan till March 2019 to States/UTs under this programme.

ANNEXURE-I

Annexure referred to Part (a) of Lok Sabha Unstarred Q. No. 1759 to be answered on 28.11.2019 regarding "Soil Erosion due to Floods"

STATEMENT SHOWING STATE-WISE FLOOD DAMAGE DURING 2016

Sl.No	Name of State	Area Affected (Mha)	Population Affected (Million)	Damages to Crops		Damage to Houses		Cattle Lost Nos.	Human Lives Lost Nos.	Damage to Public Utilities (Rs. Crore)	Total Damages Crops, Houses & Public Utilities (Rs. Crore)
				Area (Mha)	Value (Rs. Crore)	Nos.	Value (Rs. Crore)				
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	0.003	0.386	0.003	0.000	0	0.000	4	3	0.000	0.000
2	ARUNACHAL PRADESH	0.000	0.000	0.000	0.000	354	0.000	15671	42	0.000	0.000
3	ASSAM	0.000	0.003	0.000	0.000	0	0.000	0	36	17.890	17.890
4	BIHAR	0.410	8.823	0.410	443.530	16717	44.262	246	254	40.970	528.762
5	CHATTISGARH	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
6	GOA	0	0	0	0	0	0	0	0	0	0
7	GUJARAT	0.000	0.012	0.000	0.000	128	0.000	322	99	0.000	0.000
8	HARYANA	0.004	0.000	0.004	518.235	49	4.212	1	2	0.000	522.447
9	HIMACHAL PRADESH	0.035	6.865	0.035	26.830	2283	15.270	136	40	3.020	45.120
10	JAMMU & KASHMIR	0.000	0.000	0.000	0.000	0	0.000	0	3	0.000	0.000
11	JHARKHAND	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
12	KARNATAKA	3.780	2.180	3.780	1771.260	21224	5.370	521	63	236.180	2012.810
13	KERALA	0.002	0.006	0.002	42.680	5809	0.000	56	66	0.000	42.680
14	MADHYA PRADESH	1.304	1.560	1.304	0.000	168267	0.000	2623	327	207.860	207.860
15	MAHARASHTRA	0.015	0.077	0.015	0.000	8164	0.000	1036	145	0.000	0.000
16	MANIPUR	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
17	MEGHALAYA	0.003	0.124	0.003	17.730	1412	15.477	0	4	29.322	62.529
18	MIZORAM	0.000	0.000	0.000	0.000	0	0.000	0	0	1.790	1.790
19	NAGALAND	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
20	ORISSA	0.009	0.015	0.000	0.000	9	0.050	0	3	31.245	31.295
21	PUNJAB	0.001	0.000	0.001	1.140	20	0.025	0	13	0.495	1.660
22	RAJASTHAN	0.884	4.381	0.796	1014.221	14494	20.378	635	129	164.514	1199.113
23	SIKKIM	0.000	0.000	0.000	0.000	6	0.000	0	0	0.000	0.000
24	TAMILNADU	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
25	TRIPURA	0.037	0.091	0.019	89.122	455	0.235	0	3	0.000	89.357
26	UTTAR PRADESH	0.569	2.032	0.277	123.776	35525	0.000	293	74	0.000	123.776
27	UTTARAKHAND	0.010	0.000	0.010	4.200	3324	9.397	823	114	774.640	788.237
28	WEST BENGAL	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
29	A & N ISLAND	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
30	CHANDIGARH	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
31	D & N HAVELI	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
32	DAMAN & DIU	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
33	DELHI	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
34	LAKSHADWEEP	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
35	PUDUCHCHERRY	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
	Total	7.065	26.555	6.658	4052.723	278240	114.676	22367	1420	1507.926	5675.325

ANNEXURE-II

Annexure referred to Part (a) of Lok Sabha Unstarred Q. No. 1759 to be answered on 28.11.2019 regarding “Soil Erosion due to Floods”

STATEMENT SHOWING STATE-WISE FLOOD DAMAGE DURING 2017

Sl.No	Name of State	Area Affected (Mha)	Population Affected (Million)	Damages to Crops		Damage to Houses		Cattle Lost Nos.	Human Lives Lost Nos.	Damage to Public Utilities (Rs. Crore)	Total Damages Crops, Houses & Public Utilities (Rs. Crore)
				Area (Mha)	Value (Rs. Crore)	Nos.	Value (Rs. Crore)				
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	0.000	0.000	0.000	0.000	25	0.000	0	1	0.000	0.000
2	ARUNACHAL PRADESH	0.106	0.199	0.041	97.540	1463	5.550	1177	60	1471.590	1574.680
3	ASSAM	0.398	5.602	0.398	0.000	78287	0.000	0	160	0.000	0.000
4	BIHAR	0.810	17.164	0.810	0.000	118410	0.000	373	514	0.000	0.000
5	CHATTISGARH	0.000	0.000	0.000	0.000	929	0.000	0	52	0.000	0.000
6	GOA	0	0	0	0	64	0	0	1	0	0
7	GUJARAT	0.891	0.520	0.891	8.600	38796	15.740	9445	284	3531.530	3555.870
8	HARYANA	0.001	0.000	0.001	17.960	8	0.047	0	0	0.000	18.007
9	HIMACHAL PRADESH	0.006	6.865	0.003	34.607	2195	13.300	199	75	3.460	51.367
10	JAMMU & KASHMIR	0.000	0.000	0.000	0.000	92	0.000	0	7	0.000	0.000
11	JHARKHAND	0.000	0.010	0.000	0.000	2668	0.000	0	12	0.000	0.000
12	KARNATAKA	0.000	0.000	0.000	0.000	1910	0.000	0	84	0.000	0.000
13	KERALA	0.000	0.000	0.000	0.000	3836		0	66	0.000	0.000
14	MADHYA PRADESH	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
15	MAHARASHTRA	0.000	0.000	0.000	0.000	0	0.000	0	148	0.000	0.000
16	MANIPUR	0.089	0.000	0.089	0.000	18989	0.000	0	21	0.000	0.000
17	MEGHALAYA	0.000	0.000	0.000	0.000	148	0.140	0	1	0.000	0.140
18	MIZORAM	0.046	0.000	0.046	0.000	5437	0.000	0	11	0.000	0.000
19	NAGALAND	0.568	0.667	0.568	9.300	4200	18.200	2515	29	524.090	551.590
20	ODISHA	0.658	0.697	0.021	0.000	5610	0.000	1316	3	334.315	334.315
21	PUNJAB	0.006	0.000	0.006	18.230	130	0.410	6	5	0.000	18.640
22	RAJASTHAN	1.087	3.586	0.739	1333.221	57290	30.450	5536	101	513.186	1876.857
23	SIKKIM	0.002	0.033	0.001	5.000	810	9.270	110	10	231.170	245.440
24	TAMILNADU	0.000	0.000	0.000	0.000	9	0.000	0	1	0.000	0.000
25	TRIPURA	0.057	0.020	0.047	14.387	24682	20.549	193	17	97.888	132.824
26	UTTAR PRADESH	0.437	2.923	0.396	308.053	26834	0.000	93	121	0.000	308.053
27	UTTARAKHAND	0.000	0.000	0.000	0.000	1410	0.000	0	59	0.000	0.000
28	WEST BENGAL	1.033	8.723	1.033	6914.500	826982	9158.28	2857	217	1655.160	17727.940
29	A & N ISLAND	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
30	CHANDIGARH	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
31	D & N HAVELI	0.000	0.000	0.000	0.000	0	0.000	0	0	0.100	0.100
32	DAMAN & DIU	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
33	DELHI	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
34	LAKSHADWEEP	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
35	PUDUCHCHERRY	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
	Total	6.194	47.007	5.089	8761.398	1221214	9271.936	23820	2060	8362.489	26395.823

ANNEXURE-III

Annexure referred to Part (a) of Lok Sabha Unstarred Q. No. 1759 to be answered on 28.11.2019 regarding “Soil Erosion due to Floods”

STATEMENT SHOWING STATE-WISE FLOOD DAMAGE DURING 2018*

Sl. No	Name of State	Area Affected (Mha)	Population Affected (Million)	Damages to Crops		Damage to Houses		Cattle Lost Nos.	Human Lives Lost Nos.	Damage to Public Utilities (Rs. Crore)	Total Damages Crops, Houses & Public Utilities (Rs. Crore)
				Area (Mha)	Value (Rs. Crore)	Nos.	Value (Rs. Crore)				
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
2	ARUNACHAL PRADESH	0.743	0.000	0.743	462.915	1647	589.949	47	33	86096.328	87149.192
3	ASSAM	0.043	1.322	0.043	0.000	6277	0.000	193	53	0.000	0.000
4	BIHAR	0.000	0.167	0.000	0.000	1049	0.000	0	0	0.000	0.000
5	CHATTISGARH	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
6	GOA	0	0	0	0	0	0	0	0	0	0
7	GUJARAT	0.000	0.000	0.000	0.000	2635	0.000	212	0	57.000	0.000
8	HARYANA	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
9	HIMACHAL PRADESH	0.006	68.650	0.411	12.570	6023	43.030	1285	343	10.300	65.900
10	JAMMU & KASHMIR	0.000	0.000	0.000	0.000	17	0.000	38	6	0.000	0.000
11	JHARKHAND	0.000	0.000	0.000	0.000	0	0.000	0	5	0.200	0.200
12	KARNATAKA	0.328	0.350	0.232	2220.700	14955	367.510	1207	215	2032.570	4620.780
13	KERALA	3.150	5.412	0.087	168.480	324386	998.131	47953	450	2154.149	3320.760
14	MADHYA PRADESH	0.000	0.000	0.000	0.000	315	0.000	36	31	0.000	0.000
15	MAHARASHTRA	0.000	0.000	0.000	0.000	0	0.000	65	68	0.000	0.000
16	MANIPUR	0.005	0.127	0.005	0.000	17846	0.000	400	9	0.000	0.000
17	MEGHALAYA	0.000	0.000	0.000	0.038	0	0.029	0	0	0.000	0.000
18	MIZORAM	0.000	0.000	0.000	0.000	968	0.000	3	18	0.000	0.000
19	NAGALAND	0.002	0.261	0.002	0.000	5209	0.000	794	13	0.000	0.000
20	ODISHA	0.085	2.274	0.085	0.000	19110	0.000	122	31	0.000	0.000
21	PUNJAB	0.023	0.000	0.023	0.000	234	0.000	29	14	0.000	0.000
22	RAJASTHAN	0.002	0.017	0.002	2.200	2159	2.160	341	26	27.368	31.728
23	SIKKIM	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
24	TAMILNADU	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
25	TRIPURA	0.004	0.000	0.004	0.000	7593	0.000	5	21	0.000	0.000
26	UTTAR PRADESH	0.445	0.592	0.383	230.364	28063	13.724	149	105	303.336	547.423
27	UTTARAKHAND	0.001	0.000	0.001	0.000	2062	0.000	895	101	0.000	0.000
28	WEST BENGAL	0.049	0.321	0.049	0.000	23440	0.000	93	266	0.000	0.000
29	A & N ISLAND	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
30	CHANDIGARH	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
31	D & N HAVELI	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
32	DAMAN & DIU	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
33	DELHI	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
34	LAKSHADWEEP	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
35	PUDUCHCHERRY	0.000	0.000	0.000	0.000	0	0.000	0	0	0.000	0.000
	Total	4.886	79.493	2.070	3097.266	463988	2014.532	53867	1808	90681.251	95735.983

Data is tentative as the confirmation from some of the State Governments has not yet been received