

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO. 1214

ANSWERED ON 27.07.2023

LAND LOSS DUE TO EROSION

1214. SHRI ABDUL KHALEQUE

Will the Minister of **JAL SHAKTI** be pleased to state:

- (a) whether the Government has conducted any study to ascertain the area of land lost due to erosion across the country during the last twenty years and if so, the details thereof, State-wise particularly in Assam;
- (b) whether the Government has any data to indicate the number of persons displaced due to erosion during the same period and if so, the details thereof; and
- (c) whether the country lost land due to erosion on the Indo-Bangladesh Border along Assam and West Bengal and if so, the details thereof and its effect on the international boundary?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

(a) Erosion, movement and deposition of sediment in a river are natural regulating functions of a river. Rivers tend to maintain a balance between the silt load carried and silt load deposited, maintaining a river regime. Soil erosion caused by heavy floods is a matter of concern as it leads to several associated problems like changes in river course, loss of land, etc. Flood management, including erosion control, falls within the purview of the States. Flood management and anti-erosion schemes are formulated and implemented by concerned State Governments as per their priority. The Union Government supplements the efforts of the States by providing technical guidance and also promotional financial assistance for management of floods in critical areas. The Government of India has been making continuous efforts to assist the State Governments in effective flood management and erosion control. Morphological studies using remote sensing technique by various IITs and NIIT have been carried out for major rivers including Brahmaputra river. These studies play an important role in knowing the nature of rivers in a comprehensive manner and provide assessment of bank-line movement, erosion & deposition in different reaches, derivation of reach-wise morphological indices and identification of critical reaches. These studies have been shared with concerned State Governments and other stakeholders etc. As per the morphological study of Brahmaputra river conducted by CWC through consultancy from IIT Guwahati, it has been estimated that in the Brahmaputra river total erosion of 252.6 sq. km. and deposition of 118.6 sq. km. occurred between 2003-05 and 2008-11.

(b) & (c) The State-wise area of land lost due to erosion across the country is not maintained centrally. However, the damages due to heavy rain and floods are compiled by Central Water Commission (CWC) after receipt of confirmation from respective States/UTs. The details available of damages for the past twenty years (2002 to 2021) in the States of Assam and West Bengal are given at **Annexure**.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 1214 TO BE ANSWERED IN LOK SABHA ON 27.07.2023 REGARDING “LAND LOSS DUE TO EROSION”.

Flood damage during 2002 to 2021 in the State of Assam

Sl. No.	Year	Area affected m.ha	Population affected million	Damage to Crops		Damage to Houses		Cattle lost nos.	Human lives lost nos.	Damage to public utilities in Rs.Crore	Total damages crops,houses& public utilities in Rs.Crore
				Area m.ha	Value in Rs.Crore	Nos.	Value in Rs.Crore				
1	2	3	4	5	6	7	8	9	10	11	12
1	2002	1.187	7.551	0.299	145.600	96705	41.187	4294	65	566.243	753.030
2	2003	0.932	5.652	0.932	147.000	74638	18.692	4319	52	181.402	347.094
3	2004	2.364	12.637	0.522	37.470	663168	2.190	118772	497	17.685	57.345
4	2005	0.222	1.025	9.840	23.470	10789	9.344	15	29	0.068	32.882
5	2006	0.058	0.555	0.010	1.110	7346	1.630	28	7	0.240	2.980
6	2007	1.504	10.867	0.675	-	15846	-	-	134	-	-
7	2008	0.416	2.906	0.314	3.290	56550	0.029	8002	40	0.233	3.552
8	2009	-	-	-	-	-	-	-	-	-	-
9	2010	-	2.546	1.470	36.788	54502	10.996	3754	17	19.783	67.567
10	2011	-	-	-	-	-	-	-	-	-	-
11	2012	0.935	2.914	0.328	-	-	-	6249	144	3200.310	3200.310
12	2013	-	0.01	-	-	-	-	-	-	13.84	13.84
13	2014	-	-	-	-	-	-	-	-	2.39	2.39
14	2015	-	0.02	-	-	16	-	-	-	3.32	3.32
15	2016	-	-	-	-	-	-	-	36	17.89	17.89
16	2017	0.28	5.60	0.28	178.69	111070	90.94	2763	160	3895.18	4164.81
17	2018	0.04	1.32	0.03	23.49	102737	84.01	122	53	2373.48	2480.98
18	2019	0.23	7.36	0.23	167.47	117831	151.40	281	103	2803.11	3121.98
19	2020	0.19	5.79	0.19	145.87	8122	93.36	702	150	2200.50	2439.73
20	2021	0.02	0.90	0.02	8.56	3387	12.73	-	13	1051.14	1072.43

Flood damage during 2002 to 2021 in the State of West Bengal

Sl. No.	Year	Area affected m.ha	Population affected million	Damage to Crops		Damage to Houses		Cattle lost nos.	Human lives lost nos.	Damage to public utilities in Rs.Crore	Total damages crops,houses& public utilities in Rs.Crore
				Area m.ha	Value in Rs. Crore	Nos.	Value in Rs. Crore				
1	2	3	4	5	6	7	8	9	10	11	12
1	2002	2.02	1.70	0.07	165.07	192444	14.04	12685	238	22.80	201.91
2	2003	-	0.15	0.00	13.15	5911	1.18	22	17	3.64	17.97
3	2004	-	0.18	0.00	14.22	1812	73.65	34	5	2.49	90.36
4	2005	1.38	8.11	1.38	400.00	52878	106.15	49174	25	511.74	1017.89
5	2006	0.16	8.32	0.16	31.72	430000	31.59	213	90	0.97	64.28
6	2007	2.49	11.82	2.49	78.38	996948	79.47	4451	348	1.88	159.72
7	2008	0.13	4.04	0.13	68.14	440282	262.60	3924	288	52.51	383.25
8	2009	0.12	2.61	0.12	1.79	245499	3.39	68	127	2.65	7.84
9	2010	0.00	0.24	0.00	0.29	26509	1.21	7	112	0.74	2.24
10	2011	1.23	5.68	1.23	575.30	542519	281.56	293	186	0.60	857.46
11	2012	-	0.53	0.01	20.62	49132	33.02	2200	29	632.95	686.58
12	2013	0.18	3.11	0.18	533.95	233336	178.97	28311	41	13.58	726.50
13	2014	0.05	0.45	0.05	6.13	33621	17.28	145	169	2.67	26.07
14	2015	1.30	10.84	1.30	11433.68	830245	7895.63	22774	338	6023.96	25353.27
15	2016	-	-	-	-	-	-	-	-	-	-
16	2017	1.03	8.72	1.03	6914.50	826982	9158.28	2857	217	1655.16	17727.94
17	2018	0.04	0.16	0.01	22.41	34755	13.27	17	31	18.33	54.01
18	2019	0.29	0.44	0.10	1166.07	57248	46.63	27	71	57.13	1269.83
19	2020	-	1.03	-	-	11568	-	382	227	-	0.00
20	2021	1.01	4.00	0.97	6355.76	236201	3383.23	136	163	6340.46	16079.45
