

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 2291
TO BE ANSWERED ON 05.08.2024

Steps to Maintain Ecological Balance

2291. SHRI KHALILUR RAHAMAN:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether the Government is cognizant of the fact that increased in tourism activities in hill stations across the country are vulnerable to climate change;
- (b) whether rampant infrastructural and tourism related development aiding incidents like landslides;
- (c) the steps taken/proposed to be taken by the Government to maintain the ecological balance in the hills so that incidents such in Joshimath in Uttarakhand do not occur again; and
- (d) the details of loss of lives and properties due to landslide during the last five years, State-wise?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) & (b) Unregulated tourism beyond the carrying capacity of hill stations disturb their ecological balance and may increase the vulnerability of such hill stations. Rampant infrastructural and tourism-related development, involving removal of forests and vegetation over a large area, alteration of natural water flow patterns, overloading on slopes, unscientific excavation, etc. may make the hill regions more prone to erosion and landslides, especially during heavy rainfall and earthquakes. Post disaster landslide studies carried out by the Geological Survey of India (GSI), Ministry of Mines has observed that human interference disturbs the natural environment and enhances the scope of increase in landslide occurrence.

(c) The Government of India as well as various State Governments have taken many measures for maintaining the ecological balance in the hills, including Research & Development initiatives, implementation of stringent regulations for infrastructure development, afforestation activities, biodiversity conservation measures, awareness campaigns for promoting sustainable lifestyles, formulation of strategies and action plans on climate change and for disaster management, etc.

The G.B. Pant National Institute of Himalayan Environment established by the Ministry of Environment, Forest and Climate Change (MoEF&CC) strives to advance scientific knowledge and to evolve integrated management strategies for conservation of biodiversity and natural

resources in the Indian Himalayan Region (IHR). The Ministry also implements the National Mission on Himalayan Studies (NMHS) to support the sustenance and enhancement of the ecological, natural, cultural and socio-economic capital assets and values of the IHR. Further, two out of the eight missions outlined under the National Action Plan on Climate Change (NAPCC), namely, National Mission for Sustaining Himalayan Ecosystem (NMSHE) and National Mission on Strategic Knowledge for Climate Change (NMSKCC) are dedicated to ecological studies and implemented by the Department of Science & Technology (DST).

The Ministry has also prepared the 'Guidelines on Sustainable Eco-tourism in Forest and Wildlife Areas, 2021' for promoting better understanding of nature and wildlife conservation while generating income and opportunities for the local communities in an ecologically, culturally and economically sustainable manner.

(d) As per information compiled by Ministry of Home Affairs from various States/ UTs, the details of damages caused by hydrometrological disasters during 2019-20 to 2023-24 are at Annexure.

Details of damages/ losses due to hydrometeorological disasters during the years 2019-20 to 2023-24 as reported by States/ UTs

State/UT	2019-20				2020-21				2021-22				2022-23				2023-24			
	Human Lives Lost (No.)	Cattle Lost (No.)	Houses/ Huts Damaged (No.)	Cropped Area affected (lakh ha.)	Human Lives Lost (No.)	Cattle Lost (No.)	Houses/ Huts Damaged (No.)	Cropped Area affected (lakh ha.)	Human Lives Lost (No.)	Cattle Lost (No.)	Houses/ Huts Damaged (No.)	Cropped Area affected (lakh ha.)	Human Lives Lost (No.)	Cattle Lost (No.)	Houses/ Huts Damaged (No.)	Cropped Area affected (lakh ha.)	Human Lives Lost (No.)	Cattle Lost (No.)	Houses/ Huts Damaged (No.)	Cropped Area affected (lakh ha.)
Andhra Pr.	-	-	-	-	50	10790	18537	8.81	61	3261	7720	2.38	7	291	13573	0.07	39	462	5808	2.68
Arunachal Pr.	7	23	377	-	19	809	707	0.28	6	18	98	0.02	23	49	1045	0.001	9	14	134	0
Assam	101	250	140440	2	149	393	57931	2.67	13	-	2163	0.1	200	2043	202214	1.15	65	1671	3805	0.59
Bihar	133	80	45355	2.61	30	125	10789	7.41	70	96	9535	7.06	70	-	140	0.37	518	-	250	-
Chhattisgarh	15	96	1246	0.018	61	858	14962	-	16	279	1986	-	95	533	1445	0.005	114	272	2200	-
Goa	2	-	540	-	2	-	114	-	3	16	3402	0.001	1	-	88	-	8	-	290	-
Gujarat	195	848	5318	-	215	1019	7638	-	67	8683	129497	1.49	10	120	1470	0.83	236	5148	30718	1.33
Hayana	7	-	1	-	-	-	-	-	4	-	-	-	-	-	-	-	47	2982	4686	2.16
Himachal Pr.	86	555	2940	-	44	84	1307	0.24	119	509	171	0.06	42	940	2551	0.08	449	21351	15525	0.76
Karnataka	91	59600	115792	9.35	104	1841	40028	14.32	70	797	30765	11.35	127	1289	28365	9.95	119	798	9864	0.22
Kerala	125	829	30039	0.36	128	-	5672	-	144	152	9770	0.85	76	161	2216	-	80	-	2745	-
Madhya Pr.	674	1700	51830	60.47	212	1469	42536	6.68	127	1540	70776	1.06	284	997	6646	-	201	357	2997	-
Maharashtra	253	4230	109714	4.17	215	5814	297013	11.28	322	2201	46166	2.41	206	4301	3592	-	146	207	467	-
Manipur	-	-	-	-	-	-	-	-	-	-	-	-	53	-	-	-	-	-	-	-
Meghalaya	23	-	37771	-	32	263	2374	-	2	20	1556	-	27	167	1681	0.12	26	27	2115	0
Mizoram	3	-	1523	-	-	-	350	-	-	-	-	-	-	-	1	-	5	-	212	0
Nagaland	19	5	1458	-	9	1	1030	-	2	3503	948	0.17	10	14077	1957	-	8	5	2001	0
Odisha	13	136	5139	1.49	38	64	81592	1.8	19	4632	28929	1.82	11	229	9693	1.36	4	30	3674	0.16
Punjab	20	615	2618	1.51	16	92	837	1.23	18	38	90	0.04	22	203	1888	0.83	77	63649	7101	1.66
Rajasthan	126	314	27284	23.92	-	-	-	-	51	1556	36957	6.47	91	184	25	-	70	1048	6854	-
Sikkim	6	1304	485	-	18	134	1432	0.02	3	51	1098	0.02	8	126	1013	0.002	64	1431	3083	0
Tamil Nadu	25	70	1158	-	12	1783	11421	4.63	128	6516	48510	0.83	16	508	435	1.53	78	18597	20277	2.67
Telangana	-	-	-	-	52	390	4384	2.39	-	-	-	-	39	1574	14858	-	19	605	5193	0.61
Tripura	8	15	44963	0.014	5	4	11650	-	6	33	1796	-	13	1	2476	-	35	-	6660	-
Uttar Pr.	166	297	33986	8.3	72	62	6798	1.08	162	277	11335	3.61	53	68	3267	2.13	47	358	655	-
Uttarakhand	80	400	814	0.003	68	530	1031	-	79	357	860	0.54	86	407	1218	-	109	661	3137	0.09
West Bengal	227	382	83787	0.08	354	23937	564814	5.71	98	9736	263381	3.48	-	-	-	-	-	-	-	-
D&N Haveli	-	-	-	-	6	-	-	-	1	4	1204	0.00005	-	-	-	-	5	-	270	0
Delhi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	10	11	-
J&K	17	6	11	-	77	77	8	-	-	-	-	-	16	-	-	-	19	-	83	-
Puducherry	-	-	-	-	1	656	186	0.02	2	71	347	0.04	-	999	16	-	1	-	19	0.46
Total	2422	71755	744589	114.295	1989	51195	1185141	68.57	1593	44346	709060	43.80105	1586	29267	301873	18.428	2616	119683	140834	13.39

The above details of damages have been prepared as per situation report received from NERC Control Room, MHA & Memorandum/ IMCT Report