

**GOVERNMENT OF INDIA  
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS**

**LOK SABHA  
STARRED QUESTION NO. 271  
ANSWERED ON 04<sup>TH</sup> AUGUST, 2022**

**DAMAGE TO NHS DUE TO HEAVY RAINS**

**\*271. SHRI SUDHEER GUPTA:  
SHRI RAVI KISHAN:**

**Will the Minister of ROAD TRANSPORT AND HIGHWAYS**

सड़क परिवहन और राजमार्ग मंत्री

**be pleased to state:**

**(a) whether huge damage to National Highways (NHs) due to heavy rains, landslides and floods has been reported from different parts of the country recently and if so, the details thereof, location-wise;**

**(b) whether damage to NHs due to heavy rains has severely affected the traffic causing inconvenience to commuters particularly pilgrims and inter-State travellers and if so, the details thereof;**

**(c) whether the Government has assessed the quantum of such damage and if so, the details thereof along with the steps taken by the National Highways Authority of India (NHAI) to restore the damaged NHs at the earliest;**

**(d) whether the Government proposes to establish a separate fund for rebuilding and repair of such damaged NHs and if so, the details thereof; and**

**(e) the steps taken/being taken by NHAI to use latest technology in the construction of NHs to make them less prone to damages?**

**ANSWER**

**THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS**

**(SHRI NITIN JAIRAM GADKARI)**

**(a) to (e) A statement is laid on the Table of the House.**

**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF LOK SABHA STARRED QUESTION NO. 271 FOR ANSWER ON 04.08.2022 ASKED BY SHRI SUDHEER GUPTA AND SHRI RAVI KISHAN REGARDING DAMAGE TO NHS DUE TO HEAVY RAINS**

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**(a) to (c) State / Union Territory (UT)-wise details of reported damages that occurred on National Highways (NHs) due to heavy rains, landslides, floods, etc. so far during 2022-23 are annexed.**

**The damages caused to some sections of NHs due to heavy rains, landslides, floods resulted into temporary disruptions of traffic movements; however, the Ministry ensured that immediate restoration works of such damaged NHs stretches, including those connecting pilgrimage centres and providing inter-state connectivity, were promptly carried out and the stretches were made traffic worthy within the earliest possible time; this is a continuous process.**

**(d) The Ministry has no proposal to set up a separate fund to carry out reconstruction and repair of NHs damaged due to floods. Budgetary allocations are being made every year to keep NHs traffic worthy.**

**(e) Some of the important Technological Interventions used in construction of NHs to make less prone to damages are as follows: -**

- (i) Road level is being fixed based on hydrological modelling, well above the Highest Flood level.**
- (ii) Geo-synthetics are being used for fill & cut slope stabilization and erosion protection measures to minimize landslides.**
- (iii) Modern Rock fall protection measures such as wire rope and gabions as river training works are used.**
- (iv) Latest compaction equipment are being used to compact the earth to the maximum and making it less prone to damages against heavy rain and floods.**
- (v) Soil stabilisation is being widely used to improve the properties of soils.**
- (vi) Stabilisation Technology for soil and aggregate which induces more resistance to water induced distresses.**

- (vii) Nanotechnology anti stripping agent for bituminous mixes are used.**
- (viii) Cement Grouted Bituminous Macadam for bituminous wearing courses for high rainfall region.**
- (ix) Concrete/ White Topping for water resistance pavement.**
- (x) Micro surfacing to have waterproofing bituminous surface.**
- (xi) Porous permeable pavement.**
- (xii) Nanotechnology based liquid water proof membrane.**
- (xiii) Cold patch mix for maintenance.**
- (xiv) Geo-membrane/ geo-composite for drainage purpose.**
- (xv) Chute drain and median line drain with geo cell.**

**ANNEXURE****ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF LOK SABHA STARRED QUESTION NO. 271 FOR ANSWER ON 04.08.2022 ASKED BY SHRI SUDHEER GUPTA AND SHRI RAVI KISHAN REGARDING DAMAGE TO NHS DUE TO HEAVY RAINS****State / Union Territory (UT)-wise details of reported damages that occurred on National Highways (NHs) due to heavy rains, landslides, floods, etc. so far during 2022-23**

Sl. No.	State/UT	NH No.	Types of damages
1	Andhra Pradesh	340B, 340C, 765, 42, 342, 716G, 67, 544D, 167AD, 565	scoured berms, structure damage, road surface damage, Cross Drainage (CD) Damage and parapet damage, scoured berms
2	Arunachal Pradesh	15, 315, 13, 513, 415	shoulder damage, landslide, CD damage, damage to bridge approaches, breach of road due to damage
3	Assam	37, 8, 6, 129, 715, 515, 315A, 15, 127A, 17, 51 (old no.), 127C, 117A, 53 (old no.), 54 (old no.), 715A,	Potholes, shoulder damage, submergence, depression, damage to bridge approach, slope damage, shoulder damages upto crust level, damage to structures, pavement damage, blockage of drainage spouts and weep holes, blockage of drains, erosion, road wash away.
4	Bihar	327E (old no.), 131A	Road washed out, surface damage, Crust and flank damage
5	Chhattisgarh	63, 30	Damage of Road Formation including shoulder, land sliding/rock falling
6	Gujarat	56, 848, 848-A, 756, 64, 41, 68, 251, 927D, 351, 51, 48	shoulder damage, patch and pot hole Surface, land slide, rain cut, culvert damage, road surface deteriorated, Reinforcement exposed in peir, damaged in parapet wall, damage in deck slab and beam and corrosion in steel, Damage in wing wall and abutment and damage in approach slab and head wall, Rutting and slippage
7	Himachal Pradesh	154, 3	Land slide
8	Jammu & Kashmir	44, 244	Landslide/subsidence of road, Washed out road width formation, Damage to protection works
9	Karnataka	69, 275, 169, 73, 766C, 369E, 169A, 150A, 548B, 75	embankment eroded and damaged culvert, Landslide, earth slip, cracks in pavement, water logging, guard walls damaged, damaged expansion joints, hand rails and drainage sprouts, shoulder damage
10	Kerala	183, 966B, 185	Pot Holes, damaged culvert and landslides
11	Madhya Pradesh	543, 146-B, 347-A, 347-B, 46, 69 (old no.)	Land slide, potholes, shoulder damage, culvert damage, retaining wall damage, rain cut, settlement in side slope
12	Maharashtra	161A, 752 K, 160H, 752 G, 753F, 361B, 752I, 66, 548 D, 353C, 543, 166G, 61, 160 A	Pot holes, wearing course damaged, water logging, culvert damage, railing damage, rain cut, diversion damaged, Pavement damage, retaining wall damage, overtopping, landslide

Sl. No.	State/UT	NH No.	Types of damages
13	Manipur	102, 102A, 37, 2, 202, 137, 129A, 102B	Water logged, Landslide, mudflow, overtopping, subsidence, road surface damage, damage to bailey bridge
14	Meghalaya	6, 206, 127B, 217	Damaged Pavement, landslips, culvert damage, shoulder damage, landslide, erosion, collapsed walls
15	Mizoram	108, 2, 306, 54 (old no.)	landslide and sinking formation
16	Nagaland	29, 129A	rock fall, Cracks & pot holes
17	Odisha	55	Bituminous surface damaged
18	Sikkim	310A, 10, 310	Landslide, Pavement Damage
19	Rajasthan	58, 27, 754A, 48	landslide, Rain cut, Surface damage
20	Telangana	163, 365B, 353C, 930P, 63, 765 DG, 61 Ext., 61, 365 A, 30, 161B, 65, 167N, 63 Ext, 161 BB, 353B	Road overtopped, bridge approach damaged and pipe culvert damaged, surface damaged, potholes, settlement of approach, shoulder damage, damage to CD structure, inundation due to back water, revetment failure, Expansion joints and quadrants of Major bridge damaged.
21	Tripura	8	slip cover
22	Uttarakhand	7, 107, 107A, 94 (old no.), 121 (old no.), 122, 123 (old no.), 109K	Landslide, Road damage, Retaining wall damage, erosion, damage to bridge, pothole
23	West Bengal	14, 110, 10, 17, 717	Pot Holes, Surface damage & Depression, landslide, culvert damage, overtopping, railing damage, Pier exposed due to huge scour

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