

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
RAJYA SABHA
UNSTARRED QUESTION NO -2815
ANSWERED ON – 12/08/2026

IMPACT OF HEAVY RAINFALL ON NATIONAL HIGHWAYS

2815. SHRI KAPIL SIBAL:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

- (a) details of stretches of National Highways and Expressways damaged due to heavy rainfall, landslides, flooding or erosion during the current southwest monsoon season 2026, including States most affected;
- (b) the funds allocated and utilized for emergency repairs, restoration and traffic management on affected highways; and
- (c) steps taken to improve drainage systems, slope protection and adoption of climate-resilient designs in highway projects to reduce future monsoon-related disruptions, accidents and inconvenience to the public?

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) State / Union Territory (UT) – wise details of National Highways (NHs) / National Expressways (NEs) stretches damaged significantly due to heavy rainfall, landslides, flooding or erosion during the current southwest monsoon season 2026 are at Annexure.

(b) Details of funds allocated and expenditure incurred for maintenance and repair of National NHs / NEs, including emergency repairs, restoration and traffic management on damaged NHs / NEs, during the first quarter of Financial Year (FY) 2026-27 are as under: -

Year	Allocation (₹ Crore)	Expenditure (₹ Crore)
2026-27 (till 30.06.2026)	13,000*	2,923
* - Tentative Fund Allocation for Financial Year 2026-27.		

(c) Drainage systems on NHs are designed keeping in mind expected traffic, importance and configuration of road, sources of water, hydrology and hydro-geologic conditions of catchment area, geometric characteristics of the road, presence of extreme gradients and cross slope, areas of excavation and landfill, existing drainage systems, etc. However, localized issues in drainage systems are caused due to non-clearance of existing drainage system, blockage of the drainage outfall by unauthorized construction, poor maintenance of drainage system in some cases and unprecedented rainfall leading to flooding of drainage systems. In order to prevent such issues, provision of additional culverts and upgradation of discharge capacity of existing drainage system is made duly considering the site conditions.

Further, Government has taken various initiatives for developing disaster resilient NHs infrastructure, which includes: -

- i. Consultants to include slope studies and stabilization as part of Detailed Project Report preparation. Geological and geotechnical investigations are to be carried out covering both within and beyond Right of Way (ROW) to prevent damages to property and infrastructure. Also, due emphasis to be given for construction of catch water drains, side drains with catch pits, cut off drains, cross drainage, etc.
- ii. Implementation of standardized parameters for investigating hill slope stability & selecting cost-effective long-term stabilization measures for landslide-prone areas in hilly regions.
- iii. Hill construction methodology refined which mandates initial construction only for hill cutting & slope protection and subsequent highway construction only post stabilized cutting formation and protection work.
- iv. Amendments made, for NH works in hilly regions, in the Standard Request for Proposal (RFP) Document for DPR Consultants and Standard Engineering, Procurement, and Construction (EPC) Contract Document, with modifications to incorporate provisions of the Expert Committee Report for hilly regions.
- v. DPR Consultants directed to mandatorily include analysis based on National Disaster Emergency Management (NDEM) Portal datasets, duly covering aspects of route alignment optimization, floodplain and drainage planning, risk and vulnerability assessment, environmental and social screening, landslide risk mapping in case of hill

roads. The NDEM portal contains very important geospatial layers of pattern of flood history of last thirty years, Drainage layers, & river basin networks (for cross-drainage structure design and hydraulic analysis), Flood plain and inundation zones (for identifying flood-prone areas), Soil and geotechnical layers (for geotechnical feasibility and pavement design considerations) etc.

- vi. Implementation of sustainable bio-engineering measures such as coir/jute mat hydroseeding, interlinked chain mesh with green strips, bamboo piling by stepped berms and erosion control with Vetivar grass plantation on jute matting etc. for stabilizing hilly and landslide prone areas, thereby enhancing safety on NHs in such areas.
- vii. Standard Operating Procedure issued along with delegation of powers to field officers in case of Emergent Repair Works during flood, Glacial Lake Outburst Flood (GLOF), Landslides, Avalanche or any other Natural Calamity etc. or Disaster.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF RAJYA SABHA UNSTARRED QUESTION NO. 2815 ANSWERED ON 12.08.2026 ASKED BY SHRI KAPIL SIBAL REGARDING IMPACT OF HEAVY RAINFALL ON NATIONAL HIGHWAYS

State / UT – wise details of NHs / NEs stretches damaged significantly due to heavy rainfall, landslides, flooding or erosion during the current southwest monsoon season 2026: -

S. No.	State	Length (m)
1	Andhra Pradesh	3,500
2	Arunachal Pradesh	8,965
3	Assam	8,325
4	Chhattisgarh	21,390
5	Gujarat	6,000
6	Himachal Pradesh	27,221
7	Jammu and Kashmir	10,115
8	Karnataka	1,130
9	Kerala	1,751
10	Maharashtra	13,338
11	Manipur	1,551
12	Meghalaya	1,180
13	Mizoram	3,775
14	Nagaland	1,390
15	Odisha	5,400
16	Sikkim	8,414
17	Telangana	1,160
18	Tripura	1,390
19	Uttarakhand	13,126
20	West Bengal	3,838
