

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

RAJYA SABHA
UNSTARRED QUESTION NO - 3133
ANSWERED ON – 20/08/2025

HEAVY DAMAGE OF HIGHWAYS IN HIMACHAL PRADESH

3133. SHRI HARSH MAHAJAN:

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

- (a) whether Government is aware of the heavy damages to roads, bridges and highways in Himachal Pradesh due to heavy rains, landslides and floods during this year's monsoon;
- (b) if so, the details of the affected national highways, major roads, bridges etc;
- (c) whether Government has provided or is planning to provide any special package/funds to the State for repairing and reconstruction of roads; and
- (d) whether Government is preparing any long-term policy for disaster-resistant roads in monsoon-affected areas/Himalayan States which will incorporate reinforcement technology, slope protection and the development of a cloudburst alert system?

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) to (c) The Government through the Ministry of Road Transport and Highways is primarily responsible for development and maintenance of National Highways (NHs). The concerned State Government is responsible for development and maintenance of State roads.

The NH-wise details of damage caused due to heavy rains and floods during current year's monsoon so far in the State of Himachal Pradesh is annexed.

All efforts are being made for taking up necessary works on NHs for immediate restoration of traffic either as part of ongoing contracts for development of NHs or under maintenance contracts. Further, consideration is also made for sanction of specific works on priority additionally on a case-to-case basis depending upon requirements thereof. Generally all permanent rectification works on NHs are taken up separately in a planned manner after due assessment and sanction of specific projects or as variation to ongoing contracts.

All necessary actions have been taken up accordingly for restoration of traffic on NHs damaged due to heavy rains and floods during current year's monsoon in the State of Himachal Pradesh.

As per the information provided by the Ministry of Home Affairs (MHA), based on the National Policy on Disaster Management (NPDM), the primary responsibility for disaster management, including disbursement of relief assistance on ground level, rests with the State Governments concerned, for which State Disaster Response Fund (SDRF) is placed at their disposal. Additional Financial assistance is provided from National Disaster Response Fund (NDRF), in case of disaster of 'severe nature', which includes an assessment based on the visit of an Inter-Ministerial Central Team (IMCT); such assistance inter-alia includes funds for repairing of damaged State roads. The State Government of Himachal Pradesh has been allocated an amount of ₹441.60 crore (which includes ₹397.60 crore Central share) for the financial year 2025-2026 under SDRF, of which the first installment of ₹198.80 crore from the Central share has been released to the State of Himachal Pradesh. In addition, ₹107.15 crore was released from NDRF for floods and landslides of 2024. Further, in the wake of flood, flash flood and landslides during current monsoon, the Central Government constituted an IMCT for on the spot first hand assessment of damages. IMCT visited the affected areas of the State from 18th to 21st July, 2025. A Post-Disaster Needs Assessment (PDNA) was carried out by the State Government of Himachal Pradesh in the aftermath of floods and landslides of 2023, assessing the need for recovery and reconstruction under NDRF. The Central Government has already approved an outlay of ₹2,006.40 crore to Himachal Pradesh as per the procedure established under the guidelines of the recovery and reconstruction fund window. Further the first instalment of central share of ₹451.44 crore has also been released on 7th July, 2025.

(d) Stage-wise maintenance plan considering the State-specific issues in maintenance of NHs in Hilly and North-Eastern states are given special attention.

Government encourages the adoption of innovative technologies or methods to enhance the durability and reduce the maintenance requirements of NHs (depending upon factors such as rainfall, terrain type, soil category, etc.). Such technologies or methods include stabilization of subgrade, geosynthetic reinforced layer(s) in sub-base / base, concrete roads / white-topping, perpetual pavement, High performance bituminous mixes, modified bitumen / bituminous mixes, Fiber Reinforced Concrete, Cement Grouted Bituminous Mixes, etc. Automated and Intelligent Machine-Aided Construction has been adopted which ensures cloud based maintenance records and quality work.

Various initiatives have been taken for developing disaster resilient NHs infrastructure including NHs in Hilly States/Union Territories which includes: -

- i. Memorandum of Understanding (MoU) signed with Tehri Hydro Development Corporation India Ltd (THDCIL) for specialized landslide treatment measures for the States of Uttarakhand and Arunachal Pradesh.
- ii. Decision taken in November, 2024 for implementation of cost-effective long term remedial measures of landslide prone areas in hilly regions as per Expert Committee Report.
- iii. Decision taken to ensure that Detailed Project Reports (DPRs) for roads in hilly region inter-alia-includes: -

- Comprehensive technical reports and design for slope protection measures.
- Geological and geotechnical investigation covering both within and beyond Right of Way (ROW) to prevent damages to property and infrastructure.
- Due emphasis for construction of catch water drains, side drains with catch pits, cut off drains, cross drainage, etc.

iv. MoU signed with Defence Geo-informatics Research Establishment (DGRE) for Technological collaboration of Geo-hazard mitigation measures on National Highways

v. MoU signed with Geological Survey of India (GSI) on Geological investigation for tunnels and sharing of data for Geohazard Studies.

vi. MoU signed by NHIDCL with National Institute of rock mechanics (NIRM) for broad area of collaboration in

- geotechnical Investigation scrutiny for tunnel projects, road projects,
- review/ proof check of design and drawings of tunnel during DPR / construction stage,
- checking of adequacy of instrumentation and monitoring devices,
- tunnel safety audit,
- formulation of scientific investigation based on rock mechanics and rock engineering for work package,
- training to officials, etc.

(vii) MoU signed with NIRM for peer review of Detailed Project Report for Shillong – Silchar Greenfield high speed corridor.

Initiatives have also been taken through funding a research scheme to IIT Roorkee for Development of Guidelines for the Assessment of Hillslope Instability using Instrumentation & Real Time Monitoring; an MoU has also been signed separately for study of Interferometric Synthetic Aperture Radar (InSAR)-based landslide monitoring and early warning system along a 100-km stretch of the Chardham Pilgrimage Route, Uttarakhand. It is also planned to install Early Warning & alert System capable of detecting landslide, land sinking, water table movement and communicating the location and daily status of the rockfall area covered with Protection Meshes / Rockfall barriers in Parwanoo-Solan section of NH-5 in the State of Himachal Pradesh.

Further, as per information received from Ministry of Earth Sciences, attempts have been initiated for monitoring events such as cloud bursts over a location through its surface AWS/ ARG network and Doppler Weather Radar (DWR) network. The DWR observations are available in every ten minutes in the form of cloud images and velocity of winds over the region under the range of the radar. It helps in monitoring and issuing nowcast of associated heavy rainfall activities at very short duration upto 1 hour. Also, attempts are made using High resolution Numerical Weather Prediction (NWP) models such as HRRR by assimilating this radar data for nowcasting these events.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) TO (c) OF RAJYA SABHA UNSTARRED QUESTION NO. 3133 FOR ANSWER FOR 20.08.2025 ASKED BY SHRI HARSH MAHAJAN REGARDING HEAVY DAMAGE OF HIGHWAYS IN HIMACHAL PRADESH.

NH-wise details of damage caused due to heavy rains and floods during current year's monsoon so far in the State of Himachal Pradesh

Sr. No	NH No.	Location	Type of Damage
1	03	Kullu-Manali section	Breach of embankment of highway
2	154 / 03	Nerchowk – Pandoh including Pandoh bypass section (Package-I)	Major and minor Landslides
3	03	Pandoh Bypass to Takoli Section	Elevated structure damaged due to slides with big boulders
4	03	Takoli-Kullu Section	Major and minor Landslides
5	154	Mo to Sihuni section	Landslide at the Tunnel Portal (T2P2) leading to the closure of the two lane
6	154	Chauntra to Padhar section	Road Sinking at Kotrupi
7	154	Parour to Chauntra	Retaining wall damage and Collapse
8	05	Dhalli Junction – Theog- Narkanda- Kingal- Sainj-Rampur – Wangtoo	Slips, Landslide, Damage of Retaining wall, Breast wall & Crash barrier
9	305	Sainj Luhri Anni Aut Road	Slips and damage of retaining walls
10	505A	Powari to Kalpa Road	Slips
11	705	Theog Kotkhai Hatkoti Road	Slips, Landslide, damage of Retaining wall, Breast wall, blockage of drains
12	707	Shillai Meenus Hatkoti Road	Slips & Landslide
13	7	Haryana Border - Kala Amb - Nahan - Kolar - Paonta Sahib - Uttrakhand Border	Slips & damage of retaining wall

14	907	Paonta Sahib- Jagadhari- Haryana Border (Yamuna Nagar)	Slips
15	907A	Nahan -Banethi-Sarahan -Kumarhatti	Damage of road crust, Retaining wall, Breast wall
16	105	Nalagarh to Swarghat	Slips
17	154A	Chakki- Dhar (Punjab) connecting Banikhet- Chamba -Bharmour	Heavy slips and damage of retaining walls
18	503Ext.	Mehatpur (PB Border)-Una-Amb-Mubarikpur - Dehra Gopipur- Ranital	Slips & damage of breast wall
19	503	Mubarikpur-Ranital & Matour- Dharmashala - Macleodganj NH-503	Landslide, damage of road crust, road sinking and damage of Retaining wall
20	503A	Hoshiyarpur(Punjab) to Una- Basoli- Barsar- Salooni -Bhota.	Berm damage, road edge washout, damage of culvert
21	3	Manali-Sarchu Rd & approach road to South Portal	Slides & Formation breach and damage of crash barrier
22	505	Pooh – Kaurik Rd	Slides & Formation breach and damage of crash barrier & S/wall
23	5	Hindustan – Tibet Rd	Formation breach
24	707	Paonta Sahib-Gumma	Landslide- Due to debris & boulder sliding down from hill side.
25	3	Hamirpur-Mandi	Landslide, damage of Breast wall, retaining wall, toe wall, road crust
