

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

**LOK SABHA
UNSTARRED QUESTION NO. 3095
ANSWERED ON 07TH AUGUST, 2025**

DAMAGES TO NEW ROADS, BRIDGES AND EXPRESSWAYS

**3095. SHRI K C VENUGOPAL:
SHRI BENNY BEHANAN:
ADV. ADOOR PRAKASH:
DR. KIRSAN NAMDEO:**

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सड़क परिवहन और राजमार्ग मंत्री

be pleased to state:

(a) whether the Government is aware of recent incidents of damage to newly constructed roads, bridges and expressways due to rains, if so, the details thereof;

(b) the number of such infrastructure failures reported during the last three years, project-wise and State-wise and the reasons identified for these failure;

(c) whether any action has been taken against the contractors or agencies responsible including blacklisting or penalties, if so, the details thereof;

(d) the steps taken by the Government to ensure better construction quality, drainage design and climate resilience in future highway projects;

(e) whether the Government has conducted any inquiry into the collapse of several stretches on the National Highway-66 being constructed in Kerala, if so, the details thereof and the action taken against the defaulters; and

(f) the details of measures taken by the Government to avoid such issues in construction of National Highways?

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) to (c) The detailed design, development and maintenance of National Highways (NHs) / National Expressways projects, including structures (like bridges etc.) thereon, and rectification of defects during Defect Liability Period (DLP) / Concession Period after completion of the work implemented on either Engineering, Procurement, and Construction (EPC) mode or on Build, Operate & Transfer (BOT) mode or on Hybrid Annuity mode (HAM), as per provisions of relevant Standard Contract/ Concession Agreement, are the responsibility of the concerned Contractor / Concessionaire.

Major deficiencies / damages in newly constructed NHs / National Expressways, including structures (like bridges etc.) thereon, due to rains, have been reported for 22 projects / stretches during the last three years and current year, State / Union Territory (UT) – wise details of which along with action taken are at Annexure.

(d) All efforts are made to ensure that the National Highways (NHs) are constructed as per stipulated quality standards specified in the Indian Roads Congress (IRC) specifications and codes. To ensure that highway construction adheres to stipulated quality standards, Consultants [Authority's Engineer (AE) / Independent Engineer (IE)] are appointed by the executing agencies for day-to-day supervision of works at site. Officials of executing agencies undertake inspections from time to time and ensure adherence of conformity of quality of the work done by the Concessionaire / Contractor with stipulated requirements.

Deficiencies observed, if any, are brought to the notice of the Concessionaires/ Contractors for taking up necessary corrective/ remedial actions as stipulated in technical schedules of the Contract/ Concession Agreement or within a reasonable period as decided by the executing agency / AE/ IE.

The Government has established system of receiving complaints through Public Grievance Portal, mobile based Rajmarg Yatra app for

citizen feedback regarding issues / grievances related to NHs including the quality issues. Further, for complaints received from various Social Media Platforms including complaints received from other sources about various issues concerning National Highways including issues related to quality of construction, the Government has set up an internal mechanism to takes cognizance of these complaints through web portal towards ensuring that necessary corrective actions are taken up by the Officials / Concessionaires / Contractors for the NHs projects.

The Government in Ministry of Road Transport and Highways (MoRTH) has initiated monitoring of the quality including defect rectification in NHs projects through mobile based application named as NHA One / Tatpar. This app is used by Field officers / Engineers / Contractors / Concessionaires directly from onsite, through digital reporting of daily and monthly defects, submission of geo-tagged and time-stamped photos for inspections and digital uploading of test results.

The Government has taken the following initiatives for improvement of quality control systems in implementation of NHs works, some of which are as stated below: -

- i. Adoption of Automated & Intelligent / Machine-aided Construction (AI-MC) in NH projects;**
- ii. Mandatory assessments of road conditions through Network Survey Vehicle (NSV) before start of work, before issue of completion certificate and thereafter at regular intervals of six months after completion of the work; Further revamping of NSV system for road condition assessment using analytics and enforcement of contractual provisions during Operation and Maintenance (O&M) through dedicated central cell;**
- iii. Analysis of High-Resolution Imagery collected from Drone Surveys in Drone Analytics Monitoring System (DAMS) integrated with Artificial Intelligence / Machine Learning algorithms for periodic evaluation of progress and quality of ongoing NHs works from time to time;**
- iv. Deployment of Mobile Quality Control Vans (MQCVs) equipped with Non-Destructive Testing Equipment on pilot basis in four States, namely in Gujarat, Rajasthan, Odisha and Karnataka, for**

diagnostic assessments of overall health and quality of works from time to time during project implementation phases;

- v. Deployment of Third Party Quality Auditors for independent quality audits of NH works on a case-to-case basis.**

Aspects of rainfall, high flood level, climate, type of terrain, soil category etc. are invariably taken into consideration during preparation of Detailed Project Report (DPR) for all NH development / upgradation projects. Accordingly, construction of roadside lined / unlined drains, Cross Drainage structures viz., Culverts, Minor & Major bridges across natural streams / drainage etc., are carried out as per scope of contract for the project by the Contractor / Concessionaire as per standard specifications and Indian Roads Congress (IRC) codes.

(e) and (f) National Highways Authority of India (NHAI) constituted an Expert Committee on 24.05.2025 to assess potentially vulnerable locations of Reinforced Soil (RS) Walls and Slope Protection Works in 17 under construction projects on NH-66 in the State of Kerala.

Committee visited the entire stretch of NH-66 in Kerala between 11.06.2025 to 14.07.2025 to assess the adequacy of the protection methodologies adopted / being adopted / proposed to be adopted for slopes / embankments and other vulnerable locations and to suggest necessary improvements. Committee held detailed deliberations regarding Slope Stability and RE Wall with field officers and respective Concessionaires / Contractors / IEs / Designers in July, 2025 and observed that the existing soil at sites exhibits low bearing capacity and suggested additional ground improvement techniques.

ANNEXURE**ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF LOK SABHA UNSTARRED QUESTION NO. 3095 ANSWERED ON 07.08.2025 ASKED BY SHRI K C VENUGOPAL, SHRI BENNY BEHANAN, ADV. ADOOR PRAKASH AND DR. KIRSAN NAMDEO REGARDING DAMAGES TO NEW ROADS, BRIDGES AND EXPRESSWAYS**

State / UT – wise details of major deficiencies / damages reported in newly constructed NHs / National Expressways, including structures (like bridges etc.) thereon, due to rains, during the last three years and current year along with action taken: -

State	S. No.	Project / Stretch Name	Incident Year	Details of Major damages / defects	Action Taken
Arunachal Pradesh	1	Permanent solution to Slip Zones on Papu – Yupia – Hoj – Potin section of NH-713A & NH-13 at Km 31.000 (Hoj Market), Km 38.300 (Yabi Village), Km 39.000 (Waterfall), Km 39.700 (Appa Crusher) and Km 40.300 (Crusher Point)	2024	RE wall Collapsed	Rectification of defective work initiated by the Contractor. Penalty of 5% of contract value imposed on Contractor.
Andhra Pradesh	2	Six-laning of Vijayawada bypass from Chinna Autupalli (Design Ch.0+000) to Gollapudi (Design Ch. 30+000) in Vijayawada – Gundugolanu Section of NH-16	2024	Defects in the construction of RE wall.	Concessionaire commenced the rectification work based on recommendation /suggestion of RE wall Expert. Rs.10,99,235/- was recovered as damages from Concessionaire.
Himachal Pradesh	3	Four Laning of Parwanoo- Solan Section NH-22 (New NH-05) from Km 67.000 to Km 106.139	2022	Collapse of road stretch between km. 3.130 to 3.170 on the two-lane portion of the project highway (approach road to Tunnel) of Parwanoo-Solan section of NH 05.	Restoration work has been completed by EPC Contractor
Haryana	4	Delhi-Vadodara Expressway (Pkg. 2 & 3)	2024	Rutting	Authority has imposed damages amounting to Rs.91,56,292/- on the contractor for delayed maintenance. Rectification of rutting has been taken up by Contractor and majority of the rutted portion has been rectified.
Gujarat	5	Sanchole-Santalpur Package-4	2025	Ruts, cracks and surface deformation / Distress was	Penalty of ₹2.8 crore has been imposed on the Contractor along with a recommendation for debarment up to one year or until successful

State	S. No.	Project / Stretch Name	Incident Year	Details of Major damages / defects	Action Taken
				observed recently after rains in June 2025; severe rutting at some locations.	rectification, whichever is later.
	6	Vadodara-Mumbai Expressway (Pkg-I, II & III)	2024	The stretch is not in a dilapidated condition. However, minor jerks/undulations were observed.	Concessionaire has taken up rectification work. Rs. 16.42 Cr. withheld towards delay in jerk rectification in Pkg-I.
Karnataka	7	Km 147.9000 of NH-66	2024	Landslide	Preliminary slope stabilization work at Shirur started by the concessionaire.
	8	NH-169 (Kethikallu hill near Vamanjoor (Omanjuru) town of Mangaluru Taluk in Dakshina Kannada district)	2024	Landslide	Slope benching and backfilling completed; drains constructed to divert water; safety measures like floodlights and signboards installed.
	9	Hassan Marnahally Section of NH-75	2024	Landslide at Km 227.900	Work commenced for soil nailing, hydroseeding & construction of drains.
Kerala	10	Chengala-Neeleshwaram Section of NH-66	2024	Soil nailing collapsed incident occurred at Ch. 58+035 to Ch. 58+100 (RHS) on 16.06.2025 with no casualties.	NHA has suspended the Concessionaire and its promoter from future bidding for 01-month period or till Concessionaire initiates rectification of slope protection works. Debarment also issued to Concessionaire. Senior Bridge Engineer of AE removed from site.
	11	Neeleshwaram-Thaliparambha Section of NH-66	2025	Unprotected soil slip in the cut section with debris deposition on carriageways.	Rectification work carried out and traffic restored with precautionary barricading in median portion.
	12	Six laning from start of Valanchery bypass to Kappirikkad section of NH – 66 (old NH-17) from Design Ch. 298+500 (Ex. km 304.250) to Design Chainage 335+850 (Ex. km 349.260)	2025	RE wall collapsed	Debarment of Contractor and Independent Engineering firm from participating in ongoing/future bidding for 01 month period or completion of investigation by the expert Committee whichever is later.
	13	Azhiyur-Vengalam section of NH-66	2024	Soil nailing works collapsed from Km 191+820 to Km 192+100 (LHS), Km193+400 to Km 193+540.	Show cause notice issued to Concessionaire for debarment upto 1 year + penalty of Rs. 50 Lakh to Rs. 5 Cr. Concessionaire directed to carryout rectification/ remedial measures at their own cost. Show Cause Notice issued to IE for debarment upto 1 year & penalty of Rs. 20 Lakh.
Mizoram	14	Strengthening between Km 119/000 to Km 147/00 (Length = 27.98 km) on NH-154 (new NH-6) including construction of Retaining walls at essential places in the state of Mizoram	2023	Potholes and ditches identified.	Contractor's performance security forfeited. Repair work taken up by State PWD.
Nagaland	15	Ch. 191.980 Km to 192.060 Km (Near Phesama	2025	Subsidence zone triggered; sunk	Restoration work taken up

State	S. No.	Project / Stretch Name	Incident Year	Details of Major damages / defects	Action Taken
		Village) of NH-02 between Kohima and Mao		for about 22 m in a length of 110-150 m.	
Rajasthan	16	Delhi Vadodara Expressway NE-4 (Pkg.4, 5, 6, 7,8, 9 & 16)	2024	Rutting, Raincuts, potholes, settlement, bulging of RE Wall	Damages amounting to Rs. 1.06 Cr. imposed for delayed maintenance in Pkg-4 & Rs. 88.32 Lakh for Pkg-5. Also, IIT Kharagpur has been engaged for detailed study for permanent rectification of defects. Penalty imposed on each contractor (Pkg-6, 7, 8, 9) amounting to Rs. 50 Lakhs for non-rectification of defects in the stipulated time frame as per provision of contract agreement. ontractor has rectified damages in Pkg-16.
	17	Construction of 6-lane access-controlled Greenfield highway from km 28+70 to Km. 53+0 of Sangariya (near Chautala)-Rasisar (near Bikaner) section of NH-754K as a part of Amritsar-Jamnagar Economic Corridor	2025	Deficiencies in riding quality and settlement at some locations observed	(i) Damage of Rs. 50.00 Lakhs imposed upon the Contractor. (ii) Two key personnel of Authority Engineer team were terminated due to poor supervision.
Tripura	18	Srirampur to Khowai from Km 75.700 to Km 101.300 (kailashahar Khowai Pkg-5)	2024	Distress/settlement in various stretches	Rectification taken up by Contractor.
Uttar Pradesh & Uttarakhand	19	4L of Nagina-Kashipur section of NH-74	2024	PQC panel cracks, Potholes, Road signages, Rain Cuts etc.	Recoveries initiated from the Contractor as per Schedule-M of EPC contract agreement.
West Bengal	20	Four - Laning of Baharampore - Farakka Section of NH-34 from Km 191.700 to Km 292.294	2024	Potholes, Cracking, Rutting, Edge Breaking	Rs. 2.68 Lakhs penalty imposed on Concessionaire. .
Andaman & Nicobar Islands	21	Rehabilitation of Km 181.00 to Km 206.00 section in Andaman Trunk Road of NH-4 to Intermediate Lane with hard shoulder (Pkg-VII)	2024	Distress, sinking of pavement at various locations	Rectification works completed.
Delhi	22	Urban Extension Road-II (Pkg. 2)	2024	Partial Collapse of RE Wall from Ch. 17+450 to Ch. 17+490	Stringent warning issued to Contractor and AE. Contractor reconstructed the RE wall.
