GOVERNMENT OF INDIA MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

RAJYA SABHA UNSTARRED QUESTION NO - 3137

ANSWERED ON - 20/08/2025

INFRASTRUCTURE FAILURES IN NEWLY BUILT HIGHWAYS AND BRIDGES

3137. SMT. PHULO DEVI NETAM: SHRI HARIS BEERAN:

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

- (a) whether the Ministry is aware of recent incidents of damage to newly constructed roads, bridges and expressways due to rains;
- (b) the number of such infrastructure failures reported since June, 2025, project-wise and State-wise and the reasons identified for these failures;
- (c) whether any action has been taken against the contractors or agencies responsible, including blacklisting or penalties; and
- (d) what steps the Ministry is taking to ensure better construction quality, drainage design and climate resilience in future highway projects?

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 5 projects

/ stretches during the 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 take 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 NHAI 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 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.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF RAJYA SABHA UNSTARRED QUESTION NO. 3137 ANSWERED ON 20.08.2025 ASKED BY SMT. PHULO DEVI NETAM AND SHRI HARIS BEERAN REGARDING INFRASTRUCTURE FAILURES IN NEWLY BUILT HIGHWAYS AND BRIDGES

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 current year along with action taken: -

State	S. No.	Project / Stretch Name	Details of Major damages / defects	Action Taken
Gujarat	1	Sanchore-Santalpur Package-4	Ruts, cracks and surface deformation / Distress was observed recently after rains in June 2025; severe rutting at some locations.	Penalty of ₹2.8 crore has been imposed on the Contractor along with a recommendation for debarment up to one year or until successful rectification, whichever is later.
Kerala	2	Neeleshwaram-Thaliparambha Section of NH-66	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.
	3	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)	RE wall collapsed	Debarment of Contractor and Independent Engineer firm from participating in ongoing/future bidding for 01 month period or completion of investigation by the expert Committee whichever is later.
Nagaland	4	Ch. 191.980 Km to 192.060 Km (Near Phesama Village) of NH-02 between Kohima and Mao	Subsidence zone triggered; sunk for about 22 m in a length of 110-150 m.	Restoration work taken up
Rajasthan	5	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	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.
