GOVERNMENT OF INDIA MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

LOK SABHA UNSTARRED QUESTION NO. 1929 ANSWERED ON 11th DECEMBER, 2025

QUALITY OF ROAD CONSTRUCTION GUIDELINES

1929. SHRI ANIL YASHWANT DESAI:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सडक परिवहन और राजमार्ग मंत्री

be pleased to state:

- (a) whether the quality of roads constructed in various States is far below the required standards resulting in road accidents, if so, the details thereof;
- (b) whether the Union Government has issued any guidelines to the States to ensure construction of good quality roads in the States, if so, the details thereof;
- (c) whether the Union Government will impose accountability on road construction companies apart from blacklisting, such as recovery of cost or compensation for damage to victims of road accidents and if so, the details thereof; and
- (d) if not, the reasons therefor?

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS (SHRI NITIN JAIRAM GADKARI)

(a) to (d) The Government in Ministry of Road Transport and Highways is primarily responsible for development and maintenance of National Highways (NHs). All efforts are made to ensure that the NHs are constructed as per quality standards stipulated in the Indian

Roads Congress (IRC) specifications and codes. To ensure that highway construction adheres to stipulated quality standards, Consultants (Authority's Engineer/ Independent Engineers- AE/IE) are appointed by the executing agencies for day-to-day supervision of works at site. Officials of all stakeholders including State Governments/ Union Territories undertake inspections from time to time and ensure adherence of conformity of quality of the work done by the Concessionaire/ Contractors.

As per the report on "Road Accidents in India" published by the Government for the year 2023 based on data received from States/ UTs, road accidents are multi-causal phenomenon and are the result of interplay of various factors. These can broadly be categorized into (i) human error, (ii) road condition/environment and (iii) vehicular condition. The number of accidents due to sub-standard quality of roads is not reported in the report. However, the number of accidents on all categories of roads (including NHs) on account of potholes are reported to be 5,840 out of the total number of 4,80,583 accidents all over the country.

The Government has taken the following initiatives for improvement of quality control systems in implementation of NHs works: -: -

- Policy for Adoption of Automated & Intelligent /Machine-aided
 Construction (AI-MC) in NH projects issued;
- ii. Assessments of road conditions through Network Survey Vehicle (NSV) mandated for all NHs and Expressway works at the time of completion and every six months thereafter, which is monitored through electronic platform. NSV system for road condition assessment has further been revamped using analytics for enforcement of contractual provisions during Operation and Maintenance (O&M) through dedicated central cell;
- iii. Operationalization of a centralized system called NHAI One App for Monitoring and rectification of highway defects which enables geo-tagging of defects along with photographs;

- iv. 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;
- v. 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. Decision has been taken to diversify this initiative in some more States;
- vi. Deployment of Third Party Quality Auditors for independent quality audits of NH works on a case-to-case basis.

Actions against defaulting agencies are taken as per the provisions of the Contract/ Concession agreement in case of any defaults. In addition to debarment/ blacklisting of defaulting agencies, penalties/ liquidated damages are also levied on Contractor for damages/ sub-standard works. Sub-section (1) of Section 198A of the Motor Vehicles Act, 1988 provides for any designated authority, contractor, consultant or concessionaire responsible for the design or construction or maintenance of the safety standards of the road to follow such design, construction and maintenance standards, as may be prescribed by the Government from time to time. In case of failure to comply with stipulated standards for road design, construction and maintenance which results in death or disability, the designated authority, contractor, consultant or concessionaire responsible is levied a fine up to one lakh rupees payable to the Motor Vehicle Accident Fund constituted under section 164B of the Act.