GOVERNMENT OF INDIA MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

LOK SABHA UNSTARRED QUESTION NO. †617 ANSWERED ON 25TH JULY, 2024

BRIDGE COLLAPSE ON NH

†617. DR. AMOL RAMSING KOLHE:
SHRI NILESH DNYANDEV LANKE:
SHRI AASHTIKAR PATIL NAGESH BAPURAO:
PROF. VARSHA EKNATH GAIKWAD:
SHRI SANJAY DINA PATIL:
SHRI MOHITE PATIL DHAIRYASHEEL RAJSINH
SMT. SUPRIYA SULE:
SHRI BHASKAR MURLIDHAR BHAGARE:
SHRI BAJRANG MANOHAR SONWANE:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सडक परिवहन और राजमार्ग मंत्री

be pleased to state:

(a) whether the incidents of bridge collapse on National Highways have increased in the country and if so, the number of bridge collapse reported during each of the last three years;

(b) whether the collapse of bridges built over the National Highways has caused the loss of lives and property during last few years and if so, the details thereof;

(c) the details of the companies awarded the sub-contract to undertake work on the said bridge/project;

(d) whether the Government has ordered a probe into the incidents and if so, the details thereof;

(e) whether the NHAI has taken any action/pending inquiry against the company/companies involved therein and if so, the details thereof; and

(f) whether the Government has decided to install any safety gadgets to prevent incidents caused due to the faulty construction of these bridges and if so, the details thereof;

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) to (e) Ministry of Road Transport and Highways is primarily responsible for development and maintenance of National Highways in the country. There has been a few incidences of collapse of bridges on National Highways in the country. The details of collapse of bridges during each of the last three years including the lives lost, details of investigations carried out and action taken against defaulting contractors/concessionaires, wherever applicable are attached at Annexure.

Ministry carry out condition survey of existing bridges as part (f) of preparation of detailed project report for NH development works for a section of NH and repair/rehabilitation/reconstruction of existing bridges are taken up as part of corridor development project. Ministry has issued guidelines for bridge inspection and condition survey of the existing bridges followed by appropriate repair/rehabilitation/reconstruction based on nature and severity of distresses. Ministry has issued policy guidelines and model bidding documents for real time structural health monitoring of bridges on continuous/ discrete manner. Ministry has also started comprehensive Indian Bridge Management System for condition assessment of bridges and subsequent decision making process for repair/rehabilitation/reconstruction.

ANNEXURE

ANNEXURE REFERRED TO PARTS (a) TO (e) OF LOK SABHA UNSTARRED QUESTION NO 617 FOR 25.07.2024 ASKED BY DR. AMOL RAMSING KOLHE, SHRI NILESH DNYANDEV LANKE, SHRI AASHTIKAR PATIL NAGESH BAPURAO, PROF. VARSHA EKNATH GAIKWAD, SHRI SANJAY DINA PATIL, SHRI MOHITE PATIL DHAIRYASHEEL RAJSINH, SMT. SUPRIYA SULE, SHRI BHASKAR MURLIDHAR BHAGARE AND SHRI BAJRANG MANOHAR SONWANE REGARDING "BRIDGE COLLAPSE ON NH"

DETAILS OF BRIDGES COLLAPSED DURING LAST THREE YEARS:

SI.No.	NH State the	ame of Details of ne Bridge collapse of Location Bridge	during Yea	ear of	Action taken against defaulting Contractor/ Concessionaire
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(i) Existing Permanent Bridges and Temporary Bailey Bridges

1	716	Andhra Pradesh	km153/200	Constructed in 1977 Due to heavy floods failure has taken place .	0	2021-2022	Not applicable
2	105	Haryana	km7+706	Foilung of building	0	2023-2024	Not applicable
3	105	Haryana	km14+020	Failure of bridge	0	2023-2024	Not applicable
4	105	Himacha I Pradesh	km17+661	due to unprecedented flood	0	2023-2024	Not applicable
5	46	Madhya Pradesh	km77.900	Failure due to overloaded truck on dilapidated Bridge	0	2022-2023	FIR has been launched against the transporter of the heavy consignment and legal notice was also served by PIU-Harda.
6	62	Meghala ya	km217	Washed out due to high flood	0	2022-2023	Not applicable
7	326	Odisha	km297/520	Old Bridge	0	2022-2023	Not applicable

8	16	Odisha	km79+614	Shear failure of pier cap at pier edge interface due to corrosion and tensile failure of transverse steel reinforcement (along the width of the pier). Possible deficiency in provision of reinforcement in	0	2023-2024	 (1) Penalty of Rs.5 crore imposed on the Construction Contractor, M/s. Gammon India Ltd. (2) Penalty of Rs.20 lakh imposed on the then Supervision Consultant i.e. M/s. LBLL-NICE(JV) of Construction of Bridge. (3) Debarment of DPR Consultant M/s Sheladia Associates for 1 year. (4) The cost of entire remedial measures / reconstruction including cost of DPR preparation recovered from the existing Concessionaire M/s DBL Chandikhole Bhadrak Highways Limited (5) Penalty of Rs.20 lakh and debarment for 1 year on Independent Engineer M/s. TPF Gentisa Eurostudios S.L with Segmental (6) Debarment for 3 years against the then Shri R K Singh, Sr. Bridge Engineer from Supervision
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9	510	Sikkim	Sirwani Bridge (Km 0+200)	Due to excessive rainfall and glaciel Lake Outburst Flood	0	2023-2024	Not applicable
10		Uttar Pradesh		due to heavy flood	0	2022-2023	Not applicable
11	44	Jammu and Kashmir	(km 46+305 to km 46+864)	Event was a Natural Calamity wherein excessive discharge due to unprecedented rains caused scouring beyond the prescribed design limits and damaged 3 pier foundations and caused settlement of spans.		2023-2024	Not applicable

12	313	Arunach al Pradesh	km120	Due to Overloaded traffic movement	0	2021-2022	Not applicable
13	NH- 37 old NH- 53	Manipur	km98.7	Scouring of the Abutment due to heavy incessant Rain.	0	2022-2023	Not applicable
14	NH- 102B	Manipur	km120.9	Flash flood and overloading	0	2022-2023	Not applicable
15	208	Tripura	km180	Due to movement of Overloaded heavy vehicle	0	2022-2023	Not applicable

(ii) Under construction Bridges

1	131G	Bihar	Km 11+800	A girder collapse incident occurred during construction activities, attributed to a mechanical failure that took place while a Hydra crane was being used to position shuttering for cross- girder work.	0	2022-2023	Two persons form Supervision Consultants and Two persons from Contractor side suspended/removed from the Project. Further, necessary safety measures were suggested by Expert Committee to avoid further mishappenings.
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2	20	Bihar	km133+72 0	One no of PSC Girder fallen down during erection due to the Winch failure of Crane of Elevated Structure.	1	2022-2023	Two persons form Supervision Consultants and Two persons from Contractor side suspended/removed from the Project. Further, necessary safety measures were suggested by expert Committee to avoid further mishappenings.
3	527A	Bihar	km10.270 to 10.330 (P154- P153)	A girder collapse incident occurred during construction activities, attributed to a mechanical failure	1	2023-2024	Chief Project Manager & Engineer (Launching) of Contractor and Team Leader cum Senior Bridge Engineer & Assistant Bridge Engineer of Authority's Engineer worked at the time of Collapse have been suspended by the Authority (NHAI).

4	66	Kerala	km72+297 VUP (LHS)	Collapsed during the concreting due to staging failure	0	2022-2023	Action taken on Concessionaire & Consultancy agencies. Suspended Key persons up to 4 months and Imposed Penalty.
5	66	Maharas htra	km212/105	The girder of under construction Chiplun Flyover was collapsed during launching.	0	2023-2024	An expert committee of 3 bridge experts has been constituted to find out cause of failure.
6	16	Odisha	km96+326	Human error	0	2021-2022	Penalty of Rs.30 Lakhs on the Concessionaire and penalty of Rs.5 Lakhs on the Independent Engineer. Team Leader of IE and Key Personnel of Concessionaire was suspended

7	215 (New NH- 20)	Odisha	km35+341	Improper bonding of pier cap constructed by the new contractor (balance work) over existing pier. A crane accidentally hit the already placed girder which toppled and due to eccentric loading, pier cap came off.	0	2022-2023	NHAI had constituted a Expert Committee who visited the site and as per their recommendation, the restoration scheme is prepared by Contractor through IIT and executed the same at his own risk & Cost. RO, Odisha has issued suspension order in respect of 3 nos. personnel from Contractors side & 2 nos. personnel from Supervision Consultant side
8	510	Sikkim	Singtam- Tarku (Km 0+070)	Due to excessive rainfall and glacial Lake Outburst Flood	2	2023-2024	Not applicable

9	785	Tamil Nadu	km2+850	Due to hydraulic jack failure , while fixing the bearing	1	2021-2022	3 Girders (G1,G2 & G3) at Km 2+850 between pier P4 & P5 of down ramp location of the Elevated Road of Madurai - Chettikulam section of NH-785 was collapsed while fixing of bearings, due to hydraulic jack failure and action was taken against the EPC Contractor and AE; EPC Contractor: M/s. JMC Projects (India) Ltd., Mumbai NHAI HQ vide letter dated 28.01.2022, issued orders for debarment of Contractor from participating in NHAI bids w.e.f 13.09.2021 to 28.01.2022 (i.e., date of interim action). Further, NHAI, HQ vide Lr. No. 46597 Dt. 28.01.2022 has imposed penalty of Rs.3.00 Cr to the Contractor and the same has been recovered from EPC Contractor from IPC No. 36 for the month of December, 2021. Authority Engineer: M/s. Yongma Engineering Co Limited in association with M/s. Sterling Indo Tech Consultants Pvt Ltd NHAI HQ vide letter dated
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		participating in NHAI bids w 13.09.2021 to 28.01.2022 (i.e, d of interim action). Further, NH	ate IAI, dt. of rity een eer of the 22. Lr. Jed EPC
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10	36	Famil Nadu	km107+40 0 (Major Bridge)	Segmental girder of RHS fell down due to failure of hydraulic jack	0	2022-2023	1.A Segmental Girder on P16-P17 of RHS Carriageway fell down due to mechanical failure of hydraulic jacks at Km 107+400 Anaikarai Major Bridge across Kollidam river on 22.01.2022. 2.The instant mishap has been categorized into minor failure which occurred due to non-robust temporary structure/launching- lowering system as opined by Expert Committee. 3.Key personal of the Independent Engineer (2 Nos) and Site Engineers (2 Nos) of the Concessionaire has been suspended and blacklisted with immediate effect of mishap. The Concessionaire firm has been
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							reconstruction of the collapse girders/span and its rectification at its own cost. 5. The IE (M/s. Theme Engineering Services) has been imposed a token penalty of Rs.5 Lakhs. The IE has remitted this penalty amount in favour of "National Highways Authority of India on 29.08.2022.
11	248 BB	Delhi	km0+072 to 0+112	Mechanical failure of hydraulic jack	1	2022-2023	Warning issued to Contractor

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