GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

LOK SABHA UNSTARRED QUESTION NO. 476 TO BE ANSWERED ON 06.12.2023

MEASURES TO PREVENT DERAILMENT OF TRAINS

476. SHRI A. GANESHAMURTHI:

SHRI A. RAJA:

KUNWAR DANISH ALI:

SHRI RAVNEET SINGH BITTU:

Will the Minister of RAILWAYS be pleased to state:

- (a) the number of Railway personnel as well as passengers killed and injured due to derailments, collisions, fires mishaps at level-crossings and other rail accidents during the last five years and the current year particularly in Bihar, Uttar Pradesh, Balasore and Buxar;
- (b) the causes of each accident according to the preliminary report;
- (c) whether the final report from Railway Safety Commissioner has been submitted in each of these cases and if not, the time by which it will be done;
- (d) the number of pending cases of compensation to be paid to the families of victims and the number of cases settled along with the amount paid as compensation by Railways during the said period, zone-wise;
- (e) whether effective steps have been taken to expedite disposal of such pending cases and if so, the details thereof; and
- (f) whether the Government has conducted any inquiry to look into the possible reasons for the rise of train derailment incidents and if so, the details thereof?

ANSWER

MINISTER OF RAILWAYS, COMMUNICATIONS AND ELECTRONICS & INFORMATION TECHNOLOGY

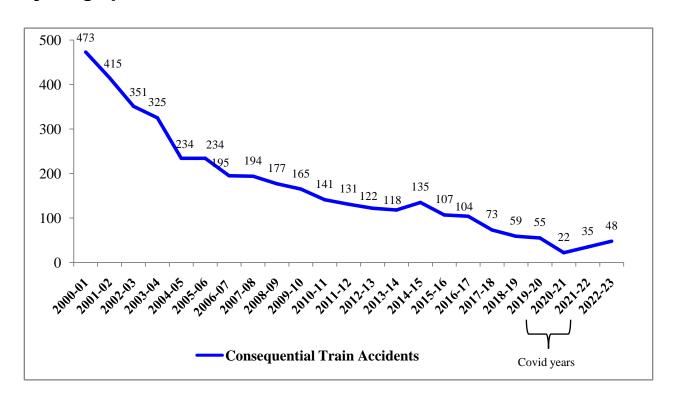
(SHRI ASHWINI VAISHNAW)

(a) to (f): A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (f) OF UNSTARRED QUESTION NO 476 BY SHRI A. GANESHAMURTHI, SHRI A. RAJA, KUNWAR DANISH ALI AND SHRI RAVNEET SINGH BITTU TO BE ANSWERED IN LOK SABHA ON 06.12.2023 REGARDING MEASURES TO PREVENT DERAILMENT OF TRAINS

(a) to (f): During the period from 2014-15 to 2023-24 (upto 31st October, 2023), total 748 persons lost their lives and 2050 were injured in consequential train accidents whereas during the period from 2004-05 to 2013-14, 904 persons lost their lives and 2831 were injured.

Consequential train accidents have declined over the years, as shown by the graph below:-



Safety is accorded the highest priority. The following measures have been taken by the Government to enhance safety in train operations:

- 1. Rashtriya Rail Sanraksha Kosh (RRSK) has been introduced in 2017-18 for replacement/renewal/upgradation of critical safety assets, with a corpus of Rs. 1 lakh crore for five years. From 2017-18 till 2021-22, a Gross expenditure of Rs. 1.08 lakh crore was incurred on RRSK works. In 2022-23, the Govt. extended the currency of RRSK for another period of five years with Gross Budgetary Support (GBS) of Rs. 45,000 crores.
- Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6498 stations upto 31.10.2023 to eliminate accident due to human failure.
- Interlocking of Level Crossing (LC) Gates has been provided at 11137 level Crossing Gates up to 31.10.2023 for enhancing safety at LC gates.
- Complete Track Circuiting of stations to enhance safety for verification of track occupancy by electrical means has been provided at 6548 stations upto 31.10.2023.
- Detailed instructions on issues related with safety of Signalling e.g. mandatory correspondence check, alteration work protocol, preparation of completion drawing, etc. have been issued.
- 6. System of disconnection and reconnection for S&T equipment as per protocol has been re-emphasized.

- 7. All locomotives are equipped with Vigilance Control Devices (VCD) to ensure alertness of Loco Pilots.
- 8. Retro-reflective sigma boards are provided on the mast which is located two OHE masts prior to the signals in electrified territories to warn the crew about the signal ahead when visibility is low due to foggy weather.
- 9. A GPS based Fog Safety Device (FSD) is provided to loco pilots in fog affected areas which enables loco pilots to know the distance of the approaching landmarks like signals, level crossing gates etc.
- 10. Modern track structure consisting of 60kg, 90 Ultimate Tensile Strength (UTS) rails, Prestressed Concrete Sleeper (PSC) Normal/Wide base sleepers with elastic fastening, fanshaped layout turnout on PSC sleepers, Steel Channel/H-beam Sleepers on girder bridges is used while carrying out primary track renewals.
- 11. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc to reduce human errors.
- 12. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby ensuring safety.
- 13. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e. Flash Butt Welding.
- 14. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).

- 15. Patrolling of railway tracks to look out for weld/rail fractures.
- 16. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.
- 17. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.
- 18. Web based online monitoring system of track assets viz. Track database and decision support system has been adopted to decide rationalized maintenance requirement and optimize inputs.
- 19. Detailed instructions on issues related with safety of Track e.g. integrated block, corridor block, worksite safety, monsoon precautions etc. have been issued.
- 20. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations and to keep a check on Rail Accidents across the country.
- 21. Replacement of conventional ICF design coaches with LHB design coaches is being done.
- 22. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.
- 23. Safety of Railway Bridges is ensured through regular inspection of Bridges. The requirement of repair/rehabilitation of Bridges is taken up based upon the conditions assessed during these inspections.
- 24. Indian Railways has displayed Statutory "Fire Notices" for widespread passenger information in all coaches. Fire posters are provided in every coach so as to inform and alert passengers

regarding various Do's and Don'ts to prevent fire. These include messages regarding not carrying any inflammable material, explosives, prohibition of smoking inside the coaches, penalties etc.

- 25. Production Units are providing Fire detection and suppression system in newly manufactured Power Cars and Pantry Cars, Fire and Smoke detection system in newly manufactured coaches. Progressive fitment of the same in existing coaches is also underway by Zonal Railways in a phased manner.
- 26. Regular counselling and training of staff is undertaken.
- 27. Concept of Rolling Block introduced in Indian Railways (Open Lines) General Rules vide gazetted notification dated 30.11.2023, wherein work of maintenance/repair/replacement is planned for 52 weeks in advance on rolling basis and executed as per plan.

During the last five years and the current year, 42 consequential train accidents have occurred wherein the Railway personnel as well as the passengers had lost their lives and were injured. The causes of these accidents broadly include track defects, Loco/Coach defects, equipment failures, human errors etc.

The final report from Railway Safety Commissioner has been submitted in all cases, except three cases, for which the final report from Railway Safety Commissioner has not been received as yet. The Commissioner of Railway Safety is an independent statutory authority who works under the control of Ministry of Civil Aviation.

Each and every train accident is inquired into either by the Commission of Railway Safety (CRS) under the Ministry of Civil Aviation or by the Departmental Inquiry Committee of Railway to determine cause of accident. The recommendations of Inquiry Reports for system improvement are implemented to prevent recurrence of similar train accidents.

As on 31.10.2023, 131 claim cases of compensation, regarding rail accidents, are pending in different benches of Railway Claims Tribunal. The amount of compensation paid by the Railways to the victims/Next of Kins of deceased in train accidents (as defined under Section 124 of the Railways Act, 1989) and level crossing during the last five years i.e. 2018-19 to 2022-23 and the current year is approx Rs 33.93 Crore. Further, necessary instructions have been issued by the Principal Bench of Railway Claims Tribunal to its respective benches to take immediate action in association with Zonal Railway Officials to get the claim application filed from the aggrieved litigants without any delay, and to dispose of the claim cases expeditiously.
