

**GOVERNMENT OF INDIA
RAILWAYS
LOK SABHA**

STARRED QUESTION NO:365
ANSWERED ON:06.09.2012
TRACK MANAGEMENT IN RAILWAYS
Baitha Shri Kameshwar ;Chaudhary Shri Arvind Kumar

Will the Minister of RAILWAYS be pleased to state:

- (a) the number of incidents of derailment/accidents of goods trains and loss incurred to the Railways thereon during the last three years;
- (b) whether the Railways have inquired into the reasons for such derailments/accidents and if so, the details thereof;
- (c) whether overloading of wagons is one of the reasons for the derailments/accidents and if so, the details thereof;
- (d) whether the Railway tracks have been subjected to inspections to assess its health/worthiness and if so, the details thereof during the above period; and
- (e) the steps taken/being taken by the Railways to check recurrence of such incidents in future and also to improve track management?

Answer

MINISTER OF RAILWAYS (SHRI MUKUL ROY)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO. 365 BY SHRI ARVIND KUMAR CHAUDHARY AND SHRI KAMESHWAR BAITHA TO BE ANSWERED IN LOK SABHA ON 06.09.2012 REGARDING TRACK MANAGEMENT IN RAILWAYS.

(a): The number of consequential derailments of goods trains during the last three years i.e. 2009-10, 2010-11 and 2011-12 were 37, 37 and 28, respectively. Loss to railway property in these derailments have been estimated to Rs.26.6 crore (approx.), Rs.47.0 crore (approx.) and Rs. 12.2 crore (approx.), respectively.

(b): Yes, Madam. Each derailment of goods train has been inquired into by the Inquiry Committee constituted for the purpose and as per the reports of the inquiry committees, cause-wise analysis of the above derailments is as under:

Cause	2009-10	2010-11	2011-12
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Failure of Railway Staff	22	21	20
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Failure of other than Railway Staff	2	4	1
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Failure of Equipment	4	2	0
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Sabotage	7	8	5
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Combination of Factors	1	1	1
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Incidental	0	1	1
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Cause could not be Established Conclusively	1	0	0
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(c): No, Madam. Railways are optimally utilizing the carrying capacity of wagons duly taking safety precautions to prevent derailments due to overloading of wagons.

(d): Yes, Madam. An elaborate schedule of inspection of track has been laid down for Keymen, Gangmate, Junior Engineer (Permanent Way), Section Engineer (Permanent Way), Assistant Engineer and Divisional Engineer. Higher officials not only conduct technical inspections but also keep a check on quantity and quality of inspections carried out by their juniors. Electronic monitoring of track geometry is carried out by Track Recording Cars (TRC) and assessment of internal defects of rails to take remedial action well before any failure of rail or weld, is carried out by Ultra Sonic Flaw Detectors (USFD). Details of Track Recording and inspections by Ultra Sonic Flaw Detectors done during the last three years are as under:-

Year	Track Recording (in Kilometers)	Inspection by Ultra Sonic Flaw Detectors (in Kilometers)
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2009-10	159670	343279
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2010-11	156870	313147
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2011-12	131005	300197
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(e): Measures taken to prevent derailments include use of long welded rails in place of fish plated joints, upgradation of track structure with the use of prestressed concrete (PSC) sleepers, progressive mechanization of maintenance with the use of modern track machines, namely, Tie Tamping, Ballast Cleaning Machines, Track Recording Cars, Ultrasonic Flaw Detectors, Self Propelled Ultrasonic Rail Testing Cars, etc. and regular patrolling of railway tracks at vulnerable locations including night patrolling and intensifying patrolling during foggy weather.

Measures taken for track management to improve safety are as under:-

(i) Modern track structure consisting of prestressed concrete (PSC) sleepers, 52 kg/ 60 kg Ultimate Tensile Strength (UTS) rails on concrete sleepers, fanshaped layout on PSC sleepers, Steel Channel Sleepers on girder bridges, is being used while carrying out primary track renewals. Further, it has been decided to lay Thick Web Switches and Weldable Cast Manganese Steel Crossings on identified routes.

(ii) Technology of Alumino Thermit (AT) Welds has been upgraded by introduction of Auto Weigh Methods to upgrade the quality and reliability of welds.

(iii) Long rail panels of 260 Meters/130 Meters length are being manufactured at the steel plants to minimize number of welded joints.

(iv) Digital Ultra Sonic Testing Machines capable of freezing scan as well as storing data have been developed.

(v) Progressive use of modern track maintenance machines viz. Tie Tamping, Ballast Cleaning Machines, Track Recording Cars, Digital Ultrasonic Flaw Detectors, Self Propelled Ultrasonic Rail Testing Cars, etc.

(vi) In order to maximize life of rails and to prevent rail fractures, Rail Grinding has been recently introduced. Two Rail Grinding Machines have been commissioned on Indian Railways in the year 2011.

(vii) Electronic monitoring of track geometry is carried out to detect defects and plan maintenance.

(viii) Track Management System (TMS), a web based system, has been introduced for development of database and decision support system and to decide rationalized maintenance requirement of tracks.