GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA
UNSTARRED QUESTION NO. 920
TO BE ANSWERED ON 04.02.2026

'52 REFORMS IN 52 WEEKS' PROGRAMME

920. SHRI DHAIRYASHEEL SAMBHAJIRAO MANE:
SHRI NAVASKANI K:
SHRI CHAVAN RAVINDRA VASANTRAO:
SHRI SUDHEER GUPTA:
SHRI SELVAM G:
SHRI C N ANNADURAI:

Will the Minister of RAILWAYS be pleased to state:

(a) whether "52 reforms in 52 weeks" programme includes specific targets for improving passenger safety and service delivery in the country including Tamil Nadu and if so, the details thereof;

(b) whether reported national decline in consequential train accidents has resulted in improved safety outcomes on railway routes in Tamil Nadu and if so, the details thereof particularly focus on improvements in operational efficiency governance, transparency and service delivery;

(c) whether Gross Budgetary Support and capital expenditure incurred by Indian Railways have led to proportionate allocation of new train services, track renewal and station redevelopment projects in Tamil Nadu and if so, the details thereof;

(d) whether Kavach automatic train protection has been implemented on high-density and high-risk routes in Tamil Nadu and if so, the details thereof and timelines for pending coverage;

(e) whether the Union Government has held consultations with the State Government of Tamil Nadu to address unmet railway infrastructure and service requirements and if so, the details thereof;

(f) whether any independent assessment or performance audit has been conducted by the government to evaluate the impact of these reforms and if so, the details thereof; and

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(g) the steps taken/being taken to institutionalise these reforms on a long term basis and to ensure sustained improvements in efficiency, governance and passenger satisfaction?

ANSWER

MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND ELECTRONICS & INFORMATION TECHNOLOGY

(SHRI ASHWINI VAISHNAW)

(a) to (g): Indian Railways has planned to carry out 52 Reforms during 2026 relating to various areas such as customer service, maintenance of assets, train operations, passenger amenities, rolling stock production and quality, construction quality, health services, adoption of new technology etc., with the objective of bringing systemic improvements in efficiency, governance and service delivery.

The reforms would place a strong focus on safety through better training, disciplined operations, technology deployment and continuous monitoring. The initiative also envisages accelerated adoption of advanced technologies, including artificial intelligence, modern Signaling, new generation rolling stock and smarter maintenance practices, alongside a fundamental upgradation of maintenance standards to ensure long-term safety and reliability.

Reforms in training and talent management through continuous skill upgradation, use of simulators and digital platforms, and linkage of training with career progression, while major improvements are planned in food quality, catering and onboard passenger services.

Safety

Safety is accorded the highest priority on Indian Railways. As a consequence of various safety measures taken over the years, there has been a steep decline in the number of accidents. Number of Consequential Train Accidents has reduced as shown below:-

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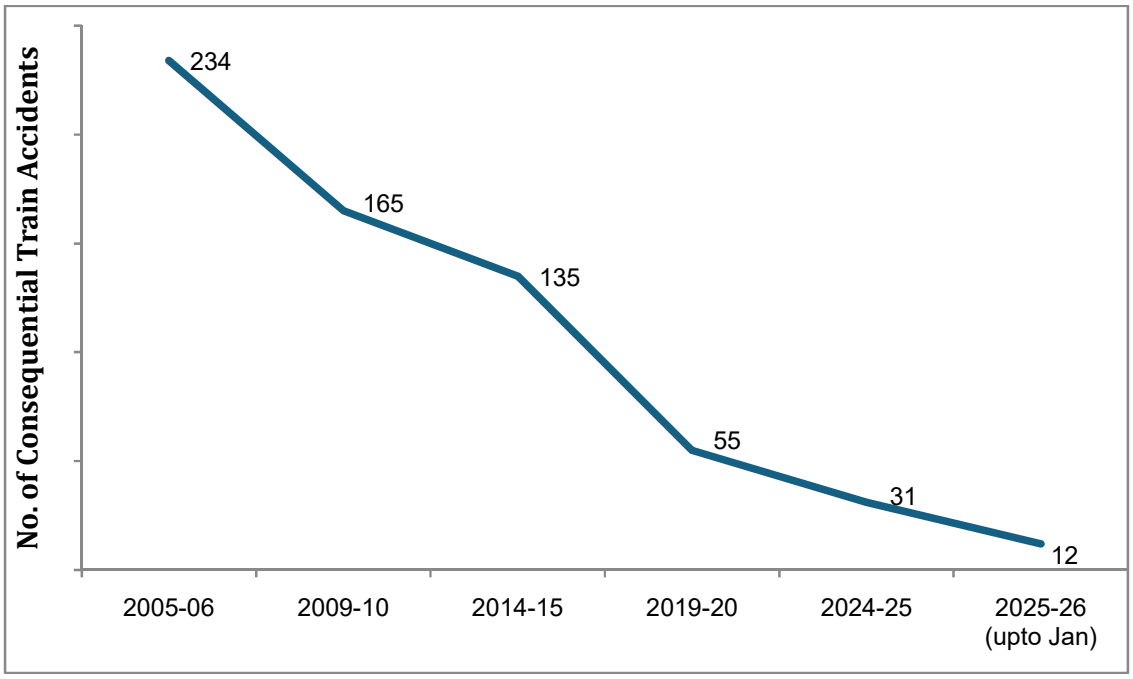
Year	Consequential Accidents
2014-15	135
2025-26 (Till date)	12 (90% lesser)



Another important index showing improvement in safety in train operations is Consequential Accidents Index. This index measures number of consequential accidents as a ratio of total running Kilometers of all trains.

$$\text{Accident Index} = \frac{\text{No. of consequential accidents}}{\text{No. of trains X million kilometers run}}$$

The details are as under:

Year	Accident Index
2014-15	0.11
2024-25	0.03 (73% lesser)

Safety is accorded the highest priority on Indian Railways. The various safety measures taken to enhance safety in train operations are as under:-

1. **On Indian Railways, the expenditure on Safety related activities has increased over the years as under:-**

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Expenditure/Budget on Safety related activities (₹ in Crore)				
2013-14	2022-23	2023-24	2024-25	2025-26
39,200	87,336	1,01,662	1,14,022	1,17,693

2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6,660 stations up to 31.12.2025 to reduce accidents due to human failure.
3. Interlocking of Level Crossing (LC) Gates has been provided at 10,097 Level Crossing Gates up to 31.12.2025 for enhancing safety at LC Gates.
4. Complete Track Circuiting of stations to enhance safety by verification of track occupancy by electrical means has been provided at 6,665 stations up to 31.12.2025.
5. Detailed instructions on issues related with safety of Signaling, 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 improve 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 alert 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, fan shaped 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 improving safety.
13. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.

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14. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e., Flash Butt Welding.
15. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).
16. Patrolling of railway tracks to look out for weld/rail fractures.
17. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.
18. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.
19. 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.
20. Detailed instructions on issues related with safety of Track, e.g. integrated block, corridor block, worksite safety, monsoon precautions, etc. have been issued.
21. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations.
22. Replacement of conventional ICF design coaches with LHB design coaches is being done.
23. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.
24. 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.
25. Indian Railways has displayed Statutory “Fire Notices” for widespread passenger information in all coaches. Fire posters are provided in every coach so as to educate 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.
26. 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.
27. Regular counselling and training of staff is undertaken.

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28. Concept of Rolling Block introduced in Indian Railways (Open Lines) General Rules vide Gazette notification dated 30.11.2023, wherein work of integrated maintenance/ repair/replacement of assets is planned up to 52 weeks in advance on rolling basis and executed as per plan.

The details of the Safety related works related to better maintenance practices, Technological improvements, better infrastructure and rolling stock etc. undertaken by Railways are tabulated below:-

S.N.	Item	2004-05 to 2013-14	2014-15 to 2024-25	2014-25 Vs. 2004-14
	Technological Improvements			
1.	Use of high-quality rails (60 Kg) (Km)	57,450 Km	1.43 Lakh Km	More than 2 times
2.	Longer Rail Panels (260m) (Km)	9,917 Km	77,522 Km	Nearly 8 times
3.	Electronic Interlocking (Stations)	837 Stations	3,691 Stations	More than 4 times
4.	Fog Pass Safety Devices (Nos.)	As on 31.03.14: 90 Nos.	As on 31.03.25: 25,939 Nos.	288 times
5.	Thick Web Switches (Nos.)	Nil	28,301 Nos.	
	Better Maintenance Practices			
1.	Primary Rail Renewal(Track Km)	32,260 Km	49,941 Km	1.5 times
2.	USFD (Ultra Sonic Flaw detection) Testing of Welds (Nos.)	79.43 Lakh	2 Crore	More than 2 times
3.	Weld failures (Nos.)	In 2013-14: 3699 Nos.	In 2024-25: 370 Nos.	90 % reduction
4.	Rail fractures (Nos.)	In 2013-14: 2548 Nos.	In 2024-25: 289 Nos.	More than 88% reduction

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Better Infrastructure and Rolling Stock				
1.	**New Track KM added (Track Km)**	**14,985 Km**	**34,428 Km**	**More than 2 times**
2.	**Flyovers (RoBs)/ Underpasses (RUBs) (Nos.)**	**4,148 Nos.**	**13,808 Nos.**	**More than 3 times**
3.	**Unmanned Level crossings (Nos.) on BG**	**As on 31.03.14: 8,948**	**As on 31.03.24: Nil (All eliminated by 31.01.19)**	**Removed**
4.	**Manufacture of LHB Coaches (Nos.)**	**2,337 Nos.**	**42,677**	**More than 18 times**

Implementation of Kavach:

i. **Kavach is an indigenously developed Automatic Train Protection (ATP) system. Kavach is a highly technology intensive system, which requires safety certification of highest order (SIL-4).**

ii. **Kavach aids the Loco Pilot in running of trains within specified speed limits by automatic application of brakes in case Loco Pilot fails to do so and also helps the trains to run safely during inclement weather.**

iii. **The first field trials on the passenger trains were started in February 2016. Based on the experience gained and Independent Safety Assessment of the system by Independent Safety Assessor (ISA), three firms were approved in 2018-19, for supply of Kavach Ver 3.2.**

iv. **Kavach was adopted as National ATP system in July, 2020.**

v. **Implementation of Kavach System involves following Key Activities:**

   a. **Installation of Station Kavach at each and every station, block section.**
   b. **Installation of RFID Tags throughout the track length.**
   c. **Installation of telecom Towers throughout the section.**
   d. **Laying of Optical Fibre Cable along the track.**

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e. Provision of Loco Kavach on each and every Locomotive running on Indian Railways.

vi. Based on deployment of Kavach version 3.2 on 1465 RKm on South Central Railway and experience gained, further improvements were made. Finally, Kavach specification version 4.0 was approved by RDSO on 16.07.2024.

vii. Kavach version 4.0 covers all the major features required for the diverse railway network. This is a significant milestone in safety for Indian Railways. Within a short period, IR has developed, tested and started deploying Automatic Train Protection System.

viii. Major improvement in Version 4.0 includes increased Location Accuracy, Improved Information of Signal Aspects in bigger yards, Station to Station Kavach interface on OFC and Direct Interface to existing Electronic Interlocking System. With these improvements, Kavach Ver.4.0. is planned for large scale deployment over Indian Railways.

ix. After extensive and elaborate trials, Kavach Version 4.0 has been successfully commissioned on 1297 Route Kilometres, covering the high density Delhi - Mumbai and Delhi – Howrah routes. On the Delhi – Mumbai route Kavach ver 4.0 has been commissioned on Junction cabin – Palwal – Mathura – Nagda section (667 Rkm) & Ahmedabad – Vadodara – Virar section (432 Rkm) and on the Delhi – Howrah route on Gaya – Saramatanr (93 Rkm) and Bardhaman - Howrah section (105 Rkm).

x. Further, track side Kavach implementation work has been taken up on 23,360 RKM covering all GQ, GD, HDN and identified sections of Indian Railways. These sections also pass through the State of Tamil Nadu.

xi. Progress of key items of Kavach on High density routes including Delhi–Mumbai & Delhi– Howrah corridors are as under:

S N	Item	Progress
i	Laying of Optical Fibre Cable	8570 Km
ii	Installation of Telecom Towers	938 nos

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Iii	Station Data Centre	767 station
iv	Installation of Track side equipment	5672 RKm
v	Provision of Kavach in Loco	4154

xii. Tender has been finalised for equipping 6,300 Electric Locomotives with Kavach version 4.0 and another tender for equipping 2,679 Diesel Locomotives is under finalisation.

xiii. Specialized training programmes on Kavach are being conducted at centralized training institutes of Indian Railways to impart training to all concerned officials. By now more than 48,000 technicians, operators and engineers have been trained on Kavach technology. This includes about 45,000 Loco Pilots & Assistant Loco Pilots. Courses have been designed in collaboration with IRISET.

Tamil Nadu

Budget allocation in the recent years has increased significantly. Budget allocation for infrastructure projects and safety works, falling fully/partly in the State of Tamil Nadu is as under:

Period	Outlay
2009-14	₹879 crore/year
2025-26	₹ 6,626 crore (more than 7.5 times)

As on 01.04.2025, 15 projects (09 new line, 03 gauge conversion and 03 doubling) of 1,700 km length, costing ₹22,808 Crore, falling fully/partly in the State of Tamil Nadu, are sanctioned. The summary is as under:-

Category	No. of sanctioned projects	Total Length (in km)	Length Commissioned upto Mar'25 (in km)	Expenditure upto Mar' 25 (₹ in Cr.)
New Line	9	812	24	1,337

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Gauge Conversion	3	748	604	3,471
Doubling /Multitracking	3	140	37	2,783
Total	15	1,700	665	7,591

Details of some of the recently completed projects falling fully/partly in Tamil Nadu are as under:

S. N.	Project	Cost (₹in Crores)
1	Dindigal-Palani-Pollachi gauge conversion (121 km)	610
2	Pollachi-Palghat gauge conversion (56 km)	350
3	Pollachi-Podhanur gauge conversion (40 km)	400
4	Quilon-Tirunelveli-Tiruchendur gauge conversion (357 km)	1,122
5	Mayiladuturai-Thiruvarur-Karaikkudi gauge conversion (187 km)	1,338
6	Madurai-Bodiyakannur gauge conversion (90 km)	593
7	Chengalpattu-Villupuram doubling (102 km)	670
8	Tiruvallur-Arakkonam 4th line (27 km)	83
9	Chennai Central-Basin Bridge doubling (2 km)	31
10	Thanjavur-Ponmalai doubling (48 km)	370
11	Villupuram-Dindigul doubling (273 km)	2,000
12	Chennai Beach-Korukkupet 3rd line (5 km)	168
13	Chennai Beach-Attipattu 4th line (22 km)	293
14	Omalur-Metturdam Patch doubling (29 km)	327
15	Chengalpattu-Villupuram and Tambaram-Chengalpattu-3rd line (133 km)	1,122
16	Salem-Magnesite Junction-Omalur doubling (11 km)	115
17	Madurai- Maniyachi-Tuticorin doubling (160 km)	1,891
18	Maniyachi-Nagercoil doubling (102 km)	1,752
19	Chennai Beach-Chennai Egmore doubling (4 km)	272
20	Karaikal-Peralam new line (23 km)	373
21	Northern End Port connectivity to Karaikal Port (1 km)	18

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Some of the projects falling fully/partly in the State of Tamil Nadu which have been taken up are as under:

S.N.	Project	Cost (₹ in Crores)
1	Tindivanam-Nagari new line (184 km)	3,631
2	Morappur-Dharmapuri new line (36 km)	359
3	Nagapattinam-Tiruturaipundi new line (43 km)	742
4	Trivandrum-Kanyakumari doubling (87 km)	3,785
5	Arakkonam yard 3rd & 4th line (6 km)	98
6	Perambur and Ambattur stations 5th & 6th lines project (6 Km)	178

In last three years i.e. 2022-23, 2023-24, 2024-25 and current financial year 2025-26, 29 surveys (06 new line and 23 doubling) covering a total length of 2,501 km has been sanctioned falling fully/partly in the State of Tamil Nadu.

Execution of important infrastructure projects falling fully/partly in the State of Tamil Nadu are held up due to delay in land acquisition. Status of land acquisition in Tamil Nadu is as under:

Total Land required for Projects in Tamil Nadu	4,326 ha
Land Acquired	1,052 ha (24%)
Balance Land to be acquired	3,274 ha (76%)

Support of the Government of Tamil Nadu is needed to expedite the land acquisition.

Details of some major projects which are delayed due to land acquisition are as under:-

S. N.	Name of the project	Total land required (in ha)	Land acquired (in ha)	Balance Land to be acquired (in ha)
1.	Tindivanam-Tiruvannamalai new line (71 km)	276	33	243
2.	Attiputtu-Puttur new line (88 km)	189	0	189
3.	Morappur-Dharmapuri new line (36 km)	92	45	47

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4.	Mannargudi-Pattukkottai new line (41 km)	196	0	196
5.	Thanjavur-Pattukottai new line (52 km)	152	0	152

Further, Rameshwaram – Dhanushkodi new line (18 km) was sanctioned at a cost of ₹734 Cr. The Foundation Stone of the project was laid on 01.03.2019. However, the project could not be started because the land acquisition has not been undertaken by the State Govt. of Tamil Nadu.

Government of India is geared up to execute projects, however success depends upon the support of Government of Tamil Nadu.

Sanction of any railway project depends upon many parameters/factors which include the following:

- **Anticipated traffic projections and remunerativeness of the proposed route**
- **First and last mile connectivity provided by the project**
- **Connection of missing links and providing additional route**
- **Augmentation of congested/saturated lines**
- **Demands raised by State Governments/Central Ministries/Public representatives**
- **Railway's own operational requirements**
- **Socio-economic considerations**
- **Overall availability of funds**

Completion of Railway project/s depends on various factors which include the following:

- **Land acquisition by State Government**
- **Forest clearance**
- **Shifting of infringing utilities**
- **Statutory clearances from various authorities**
- **Geological and topographical conditions of area**
- **Law and order situation in the area of project site**
- **Number of working months in a year for particular project site etc.**

All these factors affect the completion time and cost of the project/s.

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