

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 4364
TO BE ANSWERED ON 26.03.2025**

RAILWAY INFRASTRUCTURE PROJECTS IN KERALA

4364. SHRI K RADHAKRISHNAN:

Will the Minister of RAILWAYS be pleased to state:

- (a) the details of the status of railway infrastructure development projects, including doubling, electrification and new line projects in Kerala;**
- (b) the details of the timeline for the completion of the Sabari Rail Project and the Thalassery-Mysuru rail line;**
- (c) whether the Government plans to introduce more Vande Bharat trains or other high-speed rail services in Kerala, if so, the details thereof; and**
- (d) the details of steps being taken to improve railway safety, station modernization and passenger amenities in Kerala?**

ANSWER

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

(SHRI ASHWINI VAISHNAW)

(a) to (d): Railway projects are surveyed/ sanctioned/executed Zonal Railway wise and not State-wise as the Railways' projects may span across State boundaries. Railway projects are sanctioned on the basis

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missing links and alternate routes, augmentation of congested/saturated lines, demands raised by State Governments, Central Ministries, Members of Parliament, other public representatives, Railway's own operational requirement, socio-economic considerations etc. depending upon throwforward of ongoing projects and overall availability of funds.

As on 01.04.2024, 08 projects (02 new lines, and 06 Doubling) of total length of 419 Km, costing ₹12,350 crore, falling fully/partly in the State of Kerala, are at various stages of planning and implementation, out of which 26 Km length has been commissioned and an expenditure of ₹3,046 crore has been incurred upto March, 2024. The summary is as under:-

Category	No. of projects	Total Length (in Km)	Length Commissioned (in Km)	Expenditure upto March 2024 (₹ in Cr.)
New Line	2	146	0	304
Doubling/ Multitracking	6	273	26	2,742
Total	8	419	26	3,046

Budget allocation for infrastructure projects and safety works, falling fully/partly in the State of Kerala is as under:

Period	Outlay
2009-14	₹372 crore/year
2025-26	₹3,042 crore (more than 8 times)

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

Total Land required for Projects in Kerala	476 Ha
Land Acquired	66 Ha (14%)
Balance Land to be acquired	410 Ha (86%)

Support of the Government of Kerala is needed to expedite the land acquisition.

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

Land acquisition status in major Projects of Kerala					
Sl. No.	Name of Project	Total Status of Land (Ha)			Amount deposited with State govt. (₹ in Cr)
		Total Scope	Total Acquired	Total Pending	
1	Trivandrum-Kanyakumari Doubling	40	33	7	1312
2	Eranakulam- Kumbalam Doubling	4	2	2	262
3	Kumbalam-Turavur Doubling	10	6	4	248
4	Angamali - Sabarimala new line	416	24	392	282

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

100% BG network in the State of Kerala has been electrified.

The completion of any Railway project depends on various factors like quick land acquisition by State Government, forest clearance by officials of forest department, deposition of cost share by State Government in cost sharing projects, priority of projects, shifting of infringing utilities, statutory clearances from various authorities, geological and topographical conditions of area, law and order situation in the area of project(s) site, number of working months in a year for particular project site due to climate conditions etc.

Angamali-Sabarimala New Line Project:

Angamali-Sabarimala via Erumeli new line project was sanctioned in 1997-98. Work on Angamali-Kaladi (7 Km) and long lead works on Kaladi-Perumbavoor (10 Km) was taken up. However, further works on this project could not be taken forward due to protests by local people against land acquisition and fixing of alignment of the line, court cases filed against the project and inadequate support from the State Government of Kerala.

The estimated cost of the project has been updated by M/s Kerala Rail Development Corporation Ltd. (KRDCL) at ₹3801 crore and submitted to Government of Kerala in December, 2023 for the acceptance of the estimate and willingness to share cost of the project. The Government of Kerala has communicated their willingness to share the cost of project with certain conditions in August, 2024. Government of Kerala

has been requested by Railway to submit unconditional consent for sharing the Cost. The Government of Kerala has also been requested to enter into tripartite MoU among State Government of Kerala, Ministry of Railways and RBI for the Project.

Thalassery-Mysore New Line Project (200 Km):

The Survey for Thalassery-Mysore New Line was conducted. However, in view of the objection from the local public, the Government of Karnataka has raised objection regarding the alignment passing through Karnataka area. Moreover, this alignment passes through the forest and the eco-sensitive zones. The survey for fixing new alignment has been taken up.

Vande Bharat Trains:-

Railway network straddles across State boundaries. Accordingly, trains are introduced across such boundaries as per network requirement. Presently, 04 Vande Bharat trains viz. 20631/20632 Mangaluru Central-Thiruvananthapuram Vande Bharat Express and 20633/20634 Kasaragod-Thiruvananthapuram Vande Bharat Express, on originating/terminating basis, are catering to the needs of various stations located in the State of Kerala.

Besides, introduction of new train services, including Vande Bharat services, is an ongoing process on Indian Railways subject to traffic justification, operational feasibility, resource availability, etc.

Safety:

Following measures have been taken by Indian Railways to upgrade railway tracks which result in improving railway safety:

- i. Modern track structure consisting of 60kg, 90 Ultimate Tensile Strength (UTS) rails, Pre-stressed 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 have been used while carrying out primary track renewals.**
- ii. The Thick Web Switches and Weldable CMS Crossing have been used in turnout renewal works.**
- iii. Supply of 130m/260m long rail panels has been increased to avoid welding of joints, thereby improving safety.**
- iv. Adoption of better welding technology for rails i.e. Flash Butt Welding.**
- v. Adoption of mechanized system for track maintenance using high output plain tampers and points & crossing tampers for improved maintainability & reliability of track.**
- vi. Deployment of state-of-the-art modern machines including Rail Grinding machines manufactured in India on Railway network to further improve asset reliability.**
- vii. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc.**
- viii. Interlocking of Level Crossing (LC) Gates for enhancing safety at LC gates.**

- ix. **Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.**
- x. **Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).**

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:**

Expenditure on Safety related activities					(₹ in Cr.)	
	2013-14 (Act.)	2022-23 (Act.)	2023-24 (Act.)	RE 2024-25	BE 2025-26	
Maintenance of Permanent Way & Works	9172	18,115	20,322	21,800	23,316	
Maintenance of Motive Power and Rolling Stock	14796	27,086	30,864	31,540	30,666	
Maintenance of Machines	5406	9,828	10,772	12,112	12,880	
Road Safety LCs and ROBs/ RUBs	1986	5,347	6,662	8,184	7,706	
Track Renewals	4985	16,326	17,850	22,669	22,800	
Bridge Works	390	1,050	1,907	2,130	2,169	
Signal & Telecom Works	905	2,456	3,751	6,006	6,800	

Workshops PUs and expenditure on Safety	Incl. Misc. on	1823	7,119	9,523	9,581	10,134
Total		39,463	87,327	1,01,651	1,14,022	1,16,470

- 2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6,623 stations up to 28.02.2025 to eliminate accident due to human failure.**
- 3. Interlocking of Level Crossing (LC) Gates has been provided at 11,089 level Crossing Gates up to 28.02.2025 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 6,631 stations up to 28.02.2025.**
- 5. Kavach is a highly technology intensive system, which requires safety certification of highest order. Kavach was adopted as a National ATP system in July 2020. Kavach is provided progressively in phased manner. Kavach has already been deployed on 1548 Rkm on South Central Railway and North Central Railway. Presently, the work is in progress on Delhi-Mumbai and Delhi-Howrah corridors (approximately 3000 Route Km). Track side works on these routes have been completed on about 2066 Rkm. Regular trials are being done on these sections.**
- 6. 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.

7. **System of disconnection and reconnection for S&T equipment as per protocol has been re-emphasized.**
8. **All locomotives are equipped with Vigilance Control Devices (VCD) to improve alertness of Loco Pilots.**
9. **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.**
10. **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.**
11. **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.**
12. **Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc to reduce human errors.**
13. **Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby improving safety.**
14. **Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.**

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

26. **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.**
27. **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.**
28. **Regular counselling and training of staff is undertaken.**
29. **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:-

SN	Item	2004-05 to 2013-14	2014-15 to 2024-25 (till Jan 25)	2014-25 Vs. 2004-14
Technological improvements				
1	Use of high-quality rails (60 Kg) (Km)	57,450 km	1.4 lakh km	More than 2 times
2	Longer Rail Panels (260m) (Km)	9,917 km	76,000 km	More than 7 times
3	Electronic Interlocking (Stations)	837 stations	3,243 stations	4 times
4	Fog Pass Safety Devices (Nos.)	As on 31.03.14: 90 nos.	As on 31.01.25: 25,293	281 times
5	Thick Web Switches (Nos.)	Nil	27,079 nos.	
Better maintenance practices				
1	Primary Rail Renewal (Track Km)	32,260 km	49,000 km	1.5 times
2	USFD (Ultra Sonic Flaw detection) Testing of Welds (Nos.)	79.43 lakh	1.9 crore	More than 2 times
3	Weld failures (Nos.)	In 2013-14: 3699 nos.	In 2024-25: 301 nos.	92 % reduction
4	Rail fractures (Nos.)	In 2013-14: 2548 nos.	In 2024-25: 243 nos.	91% reduction
Better infrastructure and Rolling stock				
1	New Track KM added (Track km)	14,985 nos.	34,000 km	More than 2 times
2	Flyovers (RoBs)/ Underpasses (RUBs) (Nos.)	4,148 nos.	12,771 nos.	More than 3 times

3	Unmanned Level crossings (nos.) on BG	As on 31.03.14: 8948	As on 31.03.24: Nil (All eliminated by 31.01.19)	Removed
4	Manufacture of LHB Coaches (Nos.)	2,337 nos.	41,551	More than 17 times

All Unmanned Level Crossings (UMLCs) on the running lines of Broad Gauge (BG) network of Indian Railways have been eliminated.

Station Re-development:

Development/upgradation of stations on Indian Railways is a continuous and ongoing process and works in this regard are undertaken as per requirement, subject to inter-se priority and availability of funds. The priority for development/upgradation of stations is accorded to higher category of station over lower category of station while sanctioning and executing the works.

Ministry of Railways has launched 'Amrit Bharat Station Scheme' for development of Railway stations on Indian Railways. This scheme envisages development of stations on a continuous basis with a long-term approach. It involves preparation of master plans and their implementation in phases to improve the amenities at the stations like improvement of station access, circulating areas, waiting halls, toilets, lift/escalators as necessary, platform surfacing and cover over platform, cleanliness, free Wi-Fi, kiosks for local products through schemes like 'One Station One Product', better passenger information

systems, executive lounges, nominated spaces for business meetings. landscaping, etc. keeping in view the necessity at each station.

The scheme also envisages improvement of building, integrating the station with both sides of the city, multimodal integration, amenities for Divyangjans, sustainable and environment friendly solutions, provision of ballastless tracks, etc. as per necessity, phasing and feasibility and creation of city centre at the station in the long term.

So far, 1337 stations have been identified for development under Amrit Bharat Station Scheme, out of which 35 stations are located in the state of Kerala. The names of stations identified for development under Amrit Bharat Station Scheme in the state of Kerala are as following:

State	No. of Amrit Stations	Names of Amrit Stations
Kerala	35	Alappuzha, Angadippuram, Angamali For Kaladi, Chalakudi, Changanassery, Chengannur, Chirayinikil, Ernakulam, Ernakulam Town, Ettumanur, Feroke, Guruvayur, Kannur, Kasargod, Kayankulam, Kollam, Kozhikode, Kuttippuram, Mavelikara, Neyyatinkara, Nilambur Road, Ottappalam, Parappanangadi, Payyanur, Punalur, Shoranur Jn., Thalassery, Thiruvananthapuram, Thrisur, Tirur, Tiruvalla, Tripunithura, Vadakara, Varkala, Wadakancheri

Development / upgradation / modernisation of stations including under Amrit Bharat Station Scheme is generally funded under Plan Head-53 'Customer Amenities'. The details of allocation and expenditure under Plan Head-53 are maintained Zonal Railway-wise and not work-wise or station-wise or state-wise. The state of Kerala is covered under Southern Railway. For the zone, an allocation of ₹1,098 Crores (Revised Estimate) has been made for the financial year 2024-25 under Plan Head-53.

There is a well established system of inspection of railway bridges on Indian Railways. All the railway bridges are inspected twice a year, one before the onset of monsoon and one detailed inspection after the monsoon. In addition, certain railway bridges are also inspected more frequently depending upon their condition. Repair /strengthening / rehabilitation / rebuilding of railway bridges is a continuous process and is undertaken whenever so warranted by their physical condition as ascertained during these inspections.

Kerala is covered under Southern Railway. During last three year, 5,405 nos of railway bridges were repaired/rehabilitated/strengthened /rebuild in Indian Railway which include 274 nos of railway bridges in Southern Railway.

Passenger Amenities:

Provision of Passenger amenities at Railway stations depend upon the category of station. Improvement of passenger amenities at railway

stations in Indian Railways is a continuous and on-going process depending upon need, volume of the passenger traffic and inter-se priority of works, subject to availability of funds. Further, at present, modernization of stations is being taken up under 'Amrit Bharat Station Scheme'.
