GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA
UNSTARRED QUESTION NO. 3185
TO BE ANSWERED ON 19.03.2025

CONSTRUCTION OF ROBs AND RUBs IN JHUNJHUNU, RAJASTHAN

†3185. SHRI BRIJENDRA SINGH OLA:

Will the Minister of RAILWAYS be pleased to state:

(a) the details of pending infrastructure projects in Railways including construction of Road Over Bridges (ROBs) and Road Under Bridges (RUBs);

(b) the number of projects presently under construction in Jhunjhunu Lok Sabha constituency of Rajasthan including projects like Railway Over Bridges (ROBs) and Road Under Bridges (RUBs);

(c) the present status and timeline of completion of all these projects;

(d) the total coverage of the length under the Kavach protection system and s-well as the percentage of coverage with respect to the total rail network; and

(e) the present status of the National Rail Plan 2030, including progress made towards identifying new dedicated freight and high-speed rail corridors?

ANSWER

MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND ELECTRONICS & INFORMATION TECHNOLOGY
(SHRI ASHWINI VAISHNAW)

(a) to (e): Railway projects are surveyed/ sanctioned/executed Zonal Railway wise and not State-wise/ Parliamentary constituency wise as the Railway projects may span across State boundaries.

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Railway projects are sanctioned on the basis of remunerativeness, traffic projections, last mile connectivity, 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, across Indian Railways, 488 Railway infrastructure projects (187 New Line, 40 Gauge Conversion and 261 Doubling) of total length 44,488 Km, costing approx. ₹ 7.44 lakh crore are in planning/approval/construction stage, out of which, 12,045 Km length has been commissioned and an expenditure of approx. ₹ 2.92 lakh crore has been incurred upto March, 2024. The summary is as under:-

Category	No of Projects	Total Length NL/GC/DL (in Km)	Length Commissioned till Mar'24 (in Km)	Total Exp upto Mar'24 (₹ in Cr)
New Lines	187	20199	2855	160022
Gauge Conversion	40	4719	2972	18706
Doubling / Multitracking	261	19570	6218	113742
Total	488	44,488	12,045	2,92,470

The details of outlay for infrastructure projects across Indian Railways is as under:

Period	Outlay
2009-14	₹ 11,527 crore/year
2024-25	₹ 68,634 crore (about 6 times)

The details of commissioning / laying of new track across Indian Railways is given below:-

Period	New Track Commissioned	Average Commissioning of new tracks
2009-14	7,599 Km	4.2 Km/day
2014-24	31,180 Km	8.54 Km/day (more than 2 times)

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Railway infrastructure projects falling fully/partly in the State of Rajasthan are covered under North Western Railway (NWR), North Central Railway (NCR), Northern Railway (NR), Western Railway (WR) zones of Indian Railways.

Zonal Railway wise details of Railway projects including cost, expenditure and outlay are made available in public domain on Indian Railway's website.

As on 01.04.2024, 32 Railway Projects (15 New Lines, 5 Gauge Conversion and 12 Doubling) of a total length of 4,191 Km, costing ₹51,814 crore, falling fully/partly in the State of Rajasthan including Jhunjhunu are at various stages of planning and implementation, out of which 1,183 Km length has been commissioned and an expenditure of ₹14,786 crore has been incurred upto March, 2024. The status of work is summarized as under:-

Plan Head	No. of projects	Total Length (in Km)	Length Commissioned (Km)	Expenditure upto March 2024 (₹ in cr.)
New Lines	15	1230	134	3593
Gauge Conversion	5	1252	759	5398
Doubling / Multitracking	12	1709	290	5794
Total	32	4191	1183	14786

Budget allocation for Infrastructure projects and safety works, falling fully/ partly in Rajasthan is as under:

Period	Outlay
2009-14	₹682 crore/year
2024-25	₹ 9,959 Crore (More than 14 times)

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The details of commissioning / laying of new track falling fully/partly in the State of Rajasthan during 2009-14 and 2014-24 is as under is given below:-

Period	New Track Commissioned	Average Commissioning of new tracks
2009-14	798 Km	159.6 Km/year
2014-24	3,742 Km	374.2 Km/year (More than 2 times)

Sanctioning of works of Road over Bridge (ROB)/Road under Bridge (RUB) in lieu of Level crossings (LCs) is a continuous and dynamic process of Indian Railway. Such works are prioritised and taken up on the basis of its impact on safety in train operations, mobility of trains & impact for road users and feasibility etc.

As on 01.02.2025, 4344 Nos. ongoing Road over Bridges (ROBs)/Road under Bridges (RUBs) at the cost of Rs. 97,422 Cr on Indian Railways including 547 Nos. of ROB/ RUB at the cost of Rs. 5,213 Cr in the State of Rajasthan.

04 Nos. of ROBs/RUBs are sanctioned in Jhunjhunu parliamentary constituency, which are at various stages of planning and execution.

During 2024-25 (upto Jan'25), 827 Nos. of ROBs/RUBs have been constructed on Indian Railways.

Completion & commissioning of ROB/RUB works depends on various factors like cooperation of State Governments in giving consent for closure of LC, fixing of approach alignment, approval of General Arrangement Drawing (GAD), land acquisition, removal of encroachment, shifting of infringing utilities, statutory clearances from various authorities, law and order situation in the area of project/ work sites, duration of working season in a year for the particular project/area due to climatic conditions etc. All these factors affect the completion time of the projects/works.

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1. **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).**

2. **Kavach aids the Loco Pilot in running of train 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.**

3. **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 Version 3.2.**

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

5. **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.**
   e. **Provision of Loco Kavach on each and every Locomotive running on Indian Railways.**

6. **Based on deployment of Kavach version 3.2 on1465 Route Km on South Central Railway, lot of experience was gained. Using that further improvements were made. Finally, Kavach specification version 4.0 was approved by RDSO on 16.07.2024.**

7. **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, Indian Railways has developed, tested and started deploying Automatic Train Protection System.**

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

9. Progress of Key items comprising Kavach system on Indian Railways upto Feb' 2025 is as under: -

SN	Items	Progress
i	Laying of Optical Fibre Cable	5743 Km
ii	Installation of Telecom Towers	540 Nos.
iii	Provision of Kavach at Stations	664 Nos.
iv	Provision of Kavach in Loco	795 Locos
v	Installation of Track side equipment	3727 Rkm

10. Next phase of Kavach implementation is planned as under:

    a. Project for equipping 10,000 Locomotives has been finalized. 69 number of loco sheds have been prepared for equipping with Kavach.

    b. Bids for track side Works of Kavach for approximately 15,000 RKm have been invited covering all GQ, GD, HDN and identified sections of Indian Railways, out of which works of 1865 RKm have been awarded.

11. Currently, 3 OEMs are approved for supply of Kavach System. To increase capacity and scale of implementation, trials and approval of more OEMs are at different stages.

12. Specialized training programme on Kavach are being conducted at centralized training institutes of Indian Railways to impart training to all concerned officials. By now more than 20,000 technicians, operators and engineers have been trained on Kavach technology. Courses have been designed in collaboration with IRISET.

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The Progress made towards identifying new Dedicated Freight & High Speed Rail Corridors is as under:-

Dedicated Freight Corridor

Ministry of Railways has undertaken the work of preparation of Detailed Project Reports (DPR) for following three (03) new Dedicated Freight Corridors (DFCs).

(i) East-Coast Corridor: Kharagpur to Vijayawada

(ii) East-West corridor:

(a) Palghar-Bhusawal-Nagpur-Kharagpur-Dankuni

(b) Rajkharsawan - Kalipahari – Andal

(iii) North-South Sub-corridor: Vijayawada-Nagpur–Itarsi

DPRs of above three corridors are under examination. None of the above three DFC's have been sanctioned yet. The DFC Projects are highly capital intensive and the final decision regarding the sanction of any DFC Project depends upon many factors such as technical feasibility, financial & economic viability, traffic demand and availability of funds & financial options etc.

High – Speed Rail Corridor

Presently, Mumbai-Ahmedabad High Speed Rail (MAHSR) Project (508 Kms) is the only sanctioned project of High Speed Rail in India which is under execution.

Further, Ministry of Railways has undertaken the work of preparation of Survey/ Detailed Project Report (DPR) of following seven High Speed Rail (HSR) Corridors :-

i. **Delhi – Varanasi**
ii. **Delhi - Ahmedabad**
iii. **Delhi – Amritsar**

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iv. **Mumbai – Nagpur**

v. **Mumbai - Pune - Hyderabad**

vi. **Chennai - Bangalore - Mysore**

vii. **Varanasi – Howrah**

None of the above seven corridors has been sanctioned yet. Being highly capital intensive, the decision to sanction any HSR Corridor/Project depends on many factors such as outcome of DPR, techno-economic feasibility, availability of resources such as financing options.

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